FOREIGN AGRICULTURE

February
1980

United States Department of Agriculture — Foreign Agricultural Service

Scarecrow graces a Korean rice seedbed.

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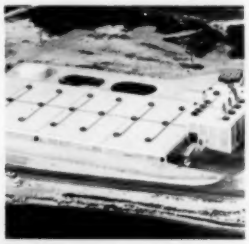

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Meeting World Food Needs Is Shared Responsibility

The message of the United States to the 20th Food and Agriculture Organization Conference (FAO) is twofold. It is a statement of fact—the fact of increasing global interdependence. And it is a request—an urgent request—that this growing interdependence be matched by a greater acceptance by all nations of shared responsibility for our world poor and our world hungry.

In the two years since the 19th FAO Conference in 1977, much has been achieved nationally and internationally to reduce the global threat of hunger. But there is no room for complacency.

Very few countries today are self-sufficient in all foodstuffs. Although food production in the developing countries grew about 3 percent a year between 1970 and 1978, population increases virtually eliminated these gains. In the poorest countries, annual per capita food production actually declined.

The developing countries have had to increase their food imports substantially. During the 1960's, food imports by the developing countries grew at about 2.7 percent per year. In the 1970's, they grew at 6.9 percent annually. While countries with rapidly rising incomes accounted for much of this increase, some low income countries have also had to import more.

As the FAO Secretariat has pointed out in its comprehensive report, *Agriculture Toward 2000*, the number of people whose diets are below the minimum critical levels has not decreased. About half a billion people—right now—are ill-fed and malnourished. Current projections show that these numbers will increase rather than diminish in the years ahead unless changes are made.

When I addressed the 19th FAO Biennial Session in Rome in 1977, I urged FAO, as the preeminent world food and agricultural organization, to focus on increasing food production and improving nutrition—particularly in developing countries. That was not a goal to be accomplished in the biennium between conferences. I stand by that goal in 1979 as the continuing—indeed as the overriding and ever more urgent—challenge of our time.

There can be little doubt that increases in external aid are necessary. But external assistance is effective only if the developing countries are firmly committed to giving the food and agriculture sector higher priority in their own development plans.

The United States stands ready to offer assistance. But the task requires a concerted effort by all members of the international community.

Our energies must be directed, first and foremost, toward accelerating food and agricultural production, especially in the low-income, food-deficit countries. Most of the food produced in the world—85 to 90 percent of it—is consumed within the countries of production. Without sustained production increases, particularly in the poorest nations, there can be no long-term food security for most of mankind.

A second step in promoting food production is increased support for international agricultural research. Research is essential for the kind of technological innovation that can raise crop yields. We are pleased that FAO has recommended, in its *Medium Term Objectives Paper*, greater support for national and international agricultural research.

We must finally increase our attention to maintaining croplands against erosion, depletion, and degradation.

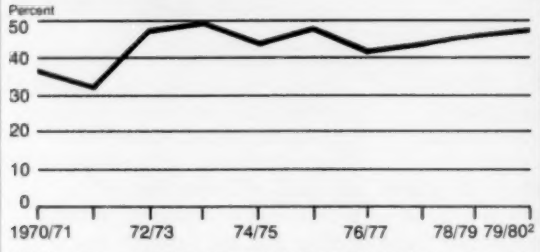
Most of the earth's lands suitable for cultivation are now currently being used. We cannot afford to waste this precious resource.

Malnutrition is also rooted in poverty and the inequitable distribution of food. We need a multifaceted approach to overcoming hunger and malnutrition.

The United States is and will remain a responsible partner in the world agricultural system. We will tailor our assistance to meet the diverse needs of the low-income and middle-income countries. We will continue to be the principal contributor to multilateral agencies while we also seek to expand our bilateral programs. And we will shape our policies to assure both the food supplies and technical know-how which the world needs.—*From remarks by Secretary of Agriculture Bob Bergland at the 20th FAO Conference, Rome, Italy, November 13, 1979.*

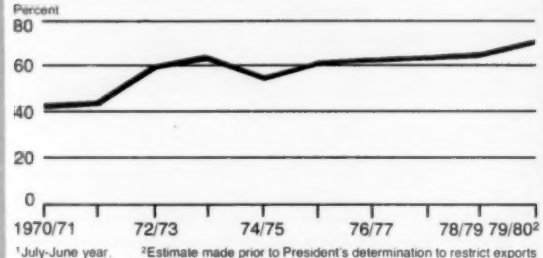
AGRI-DATA

U.S. Wheat Exports as a Share of World Exports, 1970/71-1979/80[1]



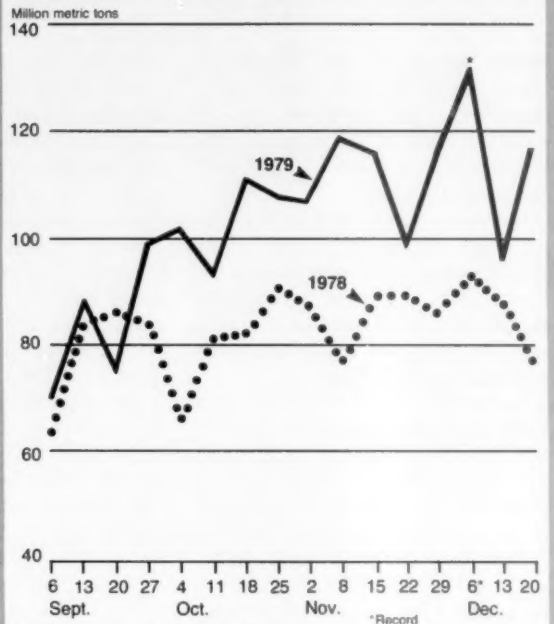
[1]July-June year. [2]Estimate made prior to President's determination to restrict exports of agricultural commodities and products to USSR.

U.S. Coarse Grain Exports as a Share of World Exports, 1970/71-1979/80[1]



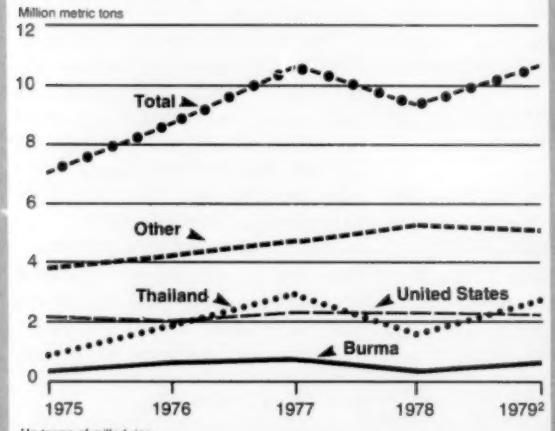
[1]July-June year. [2]Estimate made prior to President's determination to restrict exports of agricultural commodities and products to USSR.

Weekly Inspection of U.S. Grains[1] and Soybeans for Export,[2] Sept. 6-Dec.13, 1979 (Million Bushels)



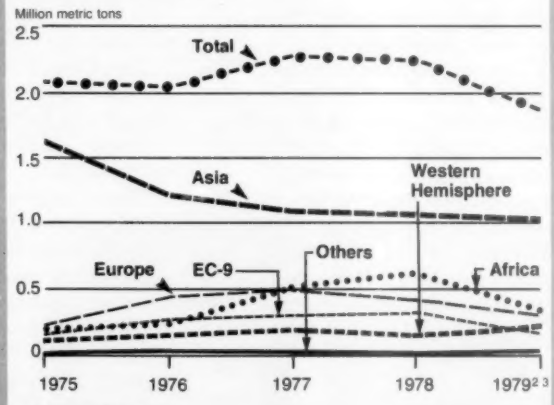
*Record
[1]Grains include corn, wheat, sorghum, barley and oats. [2]Week ending on date given.

World's Major Rice Exporting Countries[1] (Calendar Years)



[1]In terms of milled rice.
[2]Estimated.

Where U.S. Rice Exports Go[1] (Calendar Years)



[1]In terms of milled rice.
[2]Estimated.
[3]Jan.-Oct.

COMMODITY UPDATE

A MAJOR NEW DEVELOPMENT IN THE WORLD GRAIN SITUATION HAS BEEN A REDUCTION IN ESTIMATED 1979/80 grain imports by the Soviet Union, mainly as a result of the January 4 cutback in the announced amount of U.S. grain to be shipped to that country.

For the current July-June season, availability of U.S. grain to the USSR will be reduced by the cutback by around 11 million tons. Unless the Soviet Union is able to offset this reduction entirely by increased drawdowns of stocks and by making major increases in imports of grains from other origins, some reduction in USSR grain usage is likely to be required. This would, in turn, cause an increase in global stocks to be carried over into the 1980/81 season.

Another important effect of this development is likely to be some rearrangements in global trade-flow patterns for subsequent seasons. In the event it causes a permanent shift in the Soviet Union's self-sufficiency policy, the new situation could also alter the longer term outlook for world grain utilization.

Also of importance is the recently announced agreement with Mexico for the sale of U.S. agricultural products in 1980. This will make available to that Government additional quantities of grain resulting from the suspension of exports to the Soviet Union.

The world trade forecast has been cut by only 6 million tons since the December estimate was issued. This is because import estimates for China, Mexico, and Brazil were increased and total Soviet import estimates declined only 9 million tons for the July/June year.

The full impact of the U.S. grain suspension will be felt during the fourth year of the U.S.-USSR grain agreement (October 1979-September 1980) in which the previous U.S. estimate of 25 million tons to be exported to the Soviet Union has been cut to 8 million tons. However, the total world trade current forecast at 187 million tons is still a record and is 14 million higher than the 1978/79 record.

WORLD 1979/80 COTTON CROP IS ESTIMATED AT 65.1 MILLION BALES (480-lb basis), 8 percent above the 1978/79 production of 59.8 million bales. Production is up in the United States and most other major cotton exporting countries.

U.S. production is estimated at 14.9 million bales, the highest level in recent years. Favorable weather during the harvest period resulted in a record crop in the USSR, estimated at 13.0 million bales. Production is above last year's in Pakistan, Egypt, and Turkey. Production is lower in Central America.

Strong foreign demand for U.S. cotton has been apparent throughout the early months of the marketing season. Export sales in the period August through December 30, 1979, totaled 8.3 million bales. Mainland China, Japan, and Korea are the top markets. U.S. exports through November of 1.9 million bales more than doubled the 1972-76 average.

IN 1978/79, THE WORLD JUTE AND KENAF HARVEST REACHED A RECORD OF 4.41 MILLION METRIC TONS, up 20 percent from the 1977/78 level. The larger crops were a result of relatively good growing conditions and an expanded harvested area.

By contrast, the outlook for 1979/80 appears disappointing, with output dropping 16 percent to 3.91 million tons, because of unprecedented hot and dry conditions in India and Bangladesh.

Wide fluctuations in fiber prices and an irregular supply have allowed the progressive encroachment of synthetics in many sectors of the world jute market in recent years. In contrast, growth in the use of synthetics in the domestic markets of producing countries has been limited.

The volume of world trade in raw jute and kenaf fibers increased 16.2 percent between 1977/78 and 1978/79—from about 452,000 tons to 525,000 tons. Despite the sharp drop in world production, raw fiber exports should be up by about 20.5 percent, to about 633,000 tons during 1979/80.

Sales of jute products, which declined substantially between 1977/78 and 1978/79, are expected to rise by as much as 30 percent during 1979/80.

While specific figures for world stock levels are not available, combined carryover stocks in the three major producing countries—Bangladesh, India, and Thailand—grew nearly 2.4 times during 1978/79, from 402,000 tons to 995,000 tons. Carryover stocks are expected to decline to about 726,000 tons by the end of 1979/80

THE LIFTING OF SANCTIONS AGAINST ZIMBABWE-RHODESIA COULD MEAN MORE COMPETITION for U.S. tobacco, particularly in major European markets.

Rhodesia's production, processing, and marketing infrastructure is believed to be largely intact and, assuming internal stability is restored and no radical land reform measures are undertaken, production and trade could easily return during the next 5 years to pre-UDI (Unilateral Declaration of Independence) levels.

By 1985, production could be in the range of 120,000 to 130,000 tons, farm weight; and exports could be in excess of 100,000 tons, 30-40 percent greater than estimated levels in recent years.

The impact of any increase in Rhodesian exports on U.S. trade would be exacerbated by the fact that consumption in many major European markets is expected to remain stable during the next 5 years.

WORLD OILSEED PRODUCTION FOR 1979/80 IS FORECAST AT 180.2 MILLION METRIC TONS, 13 percent above the level of a year earlier and 2.1 million tons higher than the December 1979 forecast. A 19 percent increase in soybean production and a 20 percent rise in sunflower output were responsible for the gain seen last year.

In the United States, excellent weather conditions and an 11 percent rise in soybean area contributed to a record soybean crop of 61.7 million tons. U.S. sunflowerseed and cottonseed production also experienced impressive gains compared with those of 1978/79.

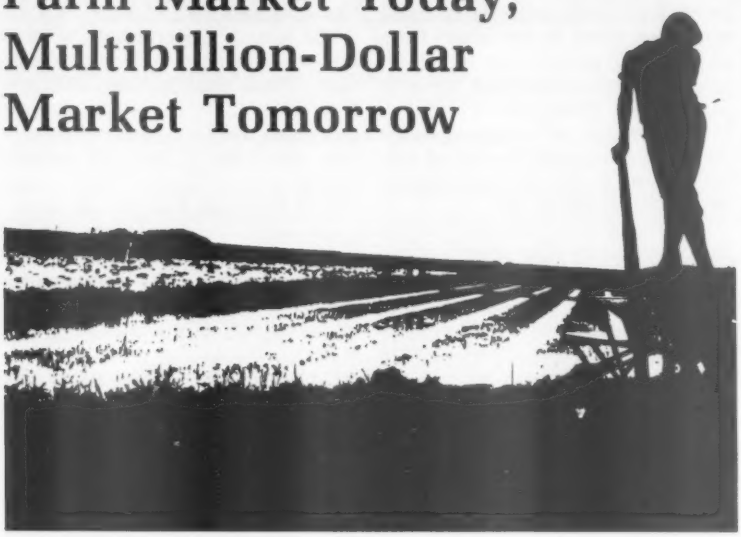
Although Brazil's soybean production is expected to recover from last year's reduced output, it is still too early in the season to confirm these estimates. Brazilian soybean output for 1979/80 is forecast at 14.0 million tons, 500,000 tons higher than December's estimate. The increase resulted from relatively good growing conditions throughout the soybean producing regions.

ANOTHER RECORD YEAR OF MEAT PRODUCTION IS FORECAST FOR 1980 IN THE KEY commercial markets of the world. Gains in poultry and pork output are expected to outweigh a 1 percent decline in beef production.

The reduction in beef production in certain of these markets is expected to result in higher world beef imports.

In the major beef and veal exporting countries, 1980 production is forecast to fall about 4 percent from the 1979 level. More attractive prices and greater access to traditional beef importing countries will likely cause another decline in domestic consumption in the exporting countries. It will also bring about a diversion of shipments from less attractively priced markets, including some countries in the Middle East or North Africa and in Eastern Europe.

Korea: Billion-Dollar U.S. Farm Market Today, Multibillion-Dollar Market Tomorrow



Above, feeder cattle in Korea, which has moved quickly to boost meat production; right, unloading grain, an expanding Korean import.

In a growth spurt reminiscent of that experienced in Japan, South Korea is generating an "economic miracle" that promises to boost U.S. farm exports there far above the $1.15 billion recorded in calendar 1978 and the $1.4 billion for fiscal 1979. Currently, it looks as if this trade expansion could at least match, and probably surpass, the 25 percent yearly increase seen for nearly 40 million people crowded into a land area no larger than the State of Virginia—thus could become one of the top five markets for U.S. farm products. During calendar 1978, Korea was the sixth largest market behind Japan, the Netherlands, the USSR, Canada, and West Germany.

Growth in demand for cotton—still the No. 1 U.S. farm export to Korea—plus accelerating imports of corn, soybeans, tallow, and other feed ingredients have given momentum to this trade. And even rice—in which Korea was self-sufficient during 1978—has been imported to compensate for a reduced crop.

Indicative of the country's rising importance as a market was the opening of an Agricultural Trade Office in Seoul on January 21. The office is staffed with a trade officer, a foreign-national marketing specialist, and secretary and provides temporary office space for U.S. tradespeople doing business in Korea. It is one of several being opened in key markets under authority of the Agricultural Trade Act of 1978.

Located in the same building will be industry groups that cooperate with FAS in market development activities in Korea.

Gerald W. Shelden, U.S. Agricultural Attaché, Seoul, sees the most dramatic U.S. trade gains coming in feeds needed to support Korea's expanding livestock industry. The tendency to upgrade diets with meat, dairy products, and other high-protein foods is almost universal among countries moving up the economic ladder, and Korea is no exception.

"As Koreans increase their incomes, they want to eat more and better," explains Shelden. "They want more animal protein but don't have the grains to feed out livestock, so they're importing—fortunately, from us."

Consumption figures readily illustrate this phenomenon. During 1978, Korean beef consumption soared 41 percent above the 1977 level to 2.7 kilograms per capita; that of pork rose 30 percent to 5.1 kilograms; and poultry, 22 percent to 2.4 kilograms.

This strong demand, in turn, has had a resounding impact on domestic industry and trade.

Korean production of all meats has risen, with gains in 1978 ranging from 8 percent for beef to 22 percent for poultry meat. Mixed feed production is climbing in line with introduction of Korean incomes, as the country continues to rely on the United States for nearly two-thirds of its farm imports.

John B. Parker, Jr.—until recently, Korea specialist with USDA's Economics, Statistics, and Cooperatives Service—has forecast U.S. agricultural exports to Korea in calendar 1979 at $1.5 billion—31 percent above those in calendar 1978. He further predicts $2 billion for 1980 and $3 billion by the mid-1980's.

This relatively small country—

By Beverly Horsley, Associate Editor, Foreign Agriculture.

scientific feeding of livestock—particularly in the efficient pork and poultry industries.

New soybean crushing facilities near Pusan have led to a near doubling of soybean imports between 1978 and 1979—still not enough to eliminate soybean meal imports. And Korea now ranks as the sixth or seventh largest market for U.S. corn.

Government and industry stress on expanding livestock herds has led to large-scale imports of breeding stock, although lack of adequate quarantine facilities and recent increases in livestock and input costs have kept demand below projected levels. During calendar 1978, such imports included 28,000 dairy cattle, 4,339 beef cattle, and 2,000 swine, with far the largest share coming from the United States.

Limitations on growth within the domestic industries and the continuing advantage of importing some products likewise are pushing up imports of meat and dairy products. Imports of beef—which Shelden says are about a fourth as costly as producing beef domestically—rose 6½-fold between 1977 and 1978 to an estimated 55,000 tons and are estimated at 52,000 tons for 1979. So far, most of these imports have come from Australia and New Zealand, but Shelden sees U.S. beef gaining a market well above the 600-ton share held in 1979, mainly for tourist hotel and restaurant uses.

U.S. suppliers, on the other hand, already are accounting for the bulk of Korea's pork imports, which totaled 8,555 tons in 1978.

In the foodgrain area, wheat imports have risen steadily during the past decade in conjunction with gains in wheat flour consumption. Growth here can be laid in part to projects by U.S. Wheat Associates, Inc., which helped introduce the Korean consumer to flour-based foods ranging from steamed breads to noodles, cakes, and cookies.

These trends are reflected in exports of U.S. wheat to Korea, which rose from $28.3 million in 1965 to $230 million estimated for 1979.

Shelden says that demand for these products now appears likely to plateau until "the school lunch program takes off, or consumers begin opting for bread or sandwiches in place of the traditional bowl of rice."

The plateauing effect may have been in part a reaction to the Government's 2-year relaxation of controls on rice consumption, which allowed satisfication of pent-up demand for rice.

Prior to 1977, the Korean Government suppressed rice consumption by encouraging manufacturers of *mokkulli* (rice wine) to use wheat flour and barley in place of rice and by requiring restaurants to blend rice with pearl barley. These measures, taken in part because of foreign-exchange shortages, were gradually waived during the past 2 years as the country's trade position improved.

The restrictions continued to be held in abeyance even after a shortfall in Korea's 1978 rice harvest and consumer dissatisfaction with a high-yielding variety called Tongil led to a large gap between domestic supply and demand.

Consequently, by spring 1979, the Koreans were scouring the world for rice imports at a time when availabilities from the United States and other traditional exporters were extremely limited. Initially, Korea bought 250,000 tons (brown basis) of highly subsidized Japanese rice and then in August 1979 purchased another 253,000 tons of U.S. rice.

"The tendency to upgrade diets with meat, dairy products, and other high-protein foods is almost universal among countries moving up the economic ladder, and Korea is no exception."

Korea's rice purchases thus shot from nothing in calendar 1978 to about 460,000 tons (milled basis) in 1979 and are seen heading toward 800,000 tons in the current (November-October) marketing year. Already this year, the United States has sold 300,000 tons of rice to Korea, and it is expected to make additional sales in the months ahead.

Only 3 years ago, in contrast, Korea had finally achieved its long-standing goal of self-sufficiency in rice and even shipped some 10,000 tons on a loan basis to Indonesia.

Then came a sharp setback in the 1978 rice crop, which fell to 5.3 million tons (milled from a record 6 million the year before) in the wake of unfavorable weather. This was followed by another disappointing season and a 1979 crop estimated at about 5.5 million tons.

The Korean Government, in turn, reimposed controls on rice consumption. These restrictions, effective November 1, 1979, include the requirement that hotels and restaurants mix rice with at least 20 percent barley.

Such restraints have not, however, significantly dampened the ample Korean appetite for rice, which results in an annual per capita consumption of about 220 pounds, compared with 80 in Japan and only 7 in the United States.

Future demand for raw cotton will hinge on continued growth in the industry, which recently has experienced a slowdown as a result of reduced orders for Korean textiles.

Shelden estimates Korean cotton consumption in 1980/81 at 302,000 tons or 1,387,000 bales (480 lb net), which is still up 8 and 11 percent, respectively, from that in the previous 2 years. Cotton import requirements, in turn, are forecast at 304,000 tons, or 1,396,000 bales, about 95 percent of which can be expected to come from the United States.

U.S. cotton, still the No. 1 U.S. farm export to Korea with $425 million in earnings estimated for 1979, has benefited from growth in Korea's textile industry. One of the world's largest and most modern textile industries—as well as a leading earner of foreign exchange—this industry has increased its spindleage by more than 2½-fold since 1970. Imports of raw cotton—about 70 percent of which go toward the manufacture of cotton goods for export—have tripled during that period, despite inroads made into the market by manmade fibers.

Also important to this trade is the availability of U.S. Commodity Credit Corporation (CCC) credit or other financing for cotton imports from the United States.

Financing under the CCC Credit Program, in fact, has been important to total U.S. agricultural trade with Korea, which in fiscal 1979 received $400 million of the $1.6 billion made available to all markets.

This fiscal year, it will receive only $200 million as a result of a sharp reduction in total CCC funding.

Continued on page 36

Lower Cassava Trade Likely To Continue Another Year

By Arthur Coffing

The world cassava trade in 1980 is expected to remain at a relatively lower level for the second consecutive year since peaking in 1978. Cassava shipments from Thailand—the world's dominant exporter—are forecast to continue at or just above the 1979 level of about 4 million metric tons, or about one-third below 1978's record volume.

The main effect of the recent sharp dropoff in cassava shipments will be felt in the European Community (EC), particularly in the Netherlands and West Germany, where the bulk of imported cassava is used in animal feed. The EC, an important market for U.S. feedgrains and oilseeds, accounts for more than 90 percent of the world's cassava imports.

Cassava, high in energy but low in protein, is used as a substitite for grains. Because of its protein deficiency, cassava-based rations are usually mixed with soybean meal. Replacing this shortfall in the cassava trade will require an equivalent quantity of grain or other sources of energy as well as lowering the use of protein meals.

The current trade picture may extend over the next several years. If that is the case, the major change is expected to be increased use of EC-grown grain. Lower cassava availability will tend to boost U.S. grain exports to the EC while subtracting from U.S. soybean exports.

Cassava—also known as tapioca, manioc, mandioca—is a shrubby, starchy root crop thought to have originated in the tropics of South America. It is grown in tropical areas throughout the world, where it is mainly used locally as a staple food crop.

Annual world production is estimated at around 100 million tons, with Brazil, Indonesia, and Nigeria accounting for half of the global output. (See the December 18, 1978, issue of *Foreign Agriculture*.)

In recent years, world trade has ranged from 4 to 7 million tons, with Thailand accounting for 95 percent of all cassava exports. Indonesia is the only other significant exporter, and only intermittently does Brazil, the largest producer, enter the export market. Many analysts feel Brazil's alcohol-for-fuel program will create a need for cassava and that Brazilian exports will be even less likely in the future.

Demand for cassava arises because while the EC is deficit in feedstuffs, EC policies allow imports of grain only after a high levy is paid—often more than 100 percent of the c.i.f. value of grains. The same policies permit importation of cassava at only a 6-percent levy, and soybeans and soybean meal with no levy at all.

Because cassava contains nearly as much energy as corn and because the two commodities are often similarly priced on world markets, cassava is usually a good buy for EC feed manufacturers who can only get corn or barley at double the world market price.

Although roughly equal to corn or barley in energy content, cassava has almost no protein; thus, for it to substitute for grain, additional sources of protein must be available at reasonable prices. Meeting this protein requirement has not been a problem because of the rapid increase in soybean production and exports by the United States, Brazil, and Argentina, along with the EC zero duty for soybeans.

The current forecast suggests relatively short cassava supplies during most of calendar 1980. As a result, EC feed compounders will seek other energy sources to compensate for lower cassava supplies and to allow for expansion. The current outlook suggests total production will expand 2-3 percent during 1980. However, most of the increase will be in cattle feeds that use citrus and beet pulps rather than grain or cassava.

The EC pig and poultry feeds (large users of cassava) are expected to use relatively more grain as other high energy ingredients are not expected to be available in sufficient quantity and quality to replace the lost cassava.

Beyond 1980, Thailand's production may remain below the 1978 record of 5.5 million tons (dry weight basis) as a result of policies of the EC and the Government of Thailand plus the fact that cassava production is generally hard on the soil and fertilization is necessary to maintain good yields.

If Thailand's cassava production remains below the 1978 level, world trade is unlikely to recover because, though many other countries produce, and occasionally export cassava, the general tendency of these countries has been to both produce and export less. It seems unlikely that this situation will be reversed in the next 2 or 3 years.

The question of trade policies arises because the rapid import growth of cassava by the EC came during a period when overall use of concentrate feeds was expanding rather slowly. This meant that EC-produced cereals did not fully share in the increase and relatively more had to be exported under subsidy.

An additional problem stemmed from transportation costs, which made cassava use particularly advantageous only in certain regions—especially Belgium, the Netherlands, and northern Germany. This advantage is alleged to have created translocation problems in the Community's hog industry.

In response to these pressures, the EC has developed an informal understanding with Thailand for limitations on future exports to the EC. In turn, the EC is providing assistance to Thailand to encourage farmers to shift to other crops.

A longer term situation of limited export availabilities of cassava would tend to benefit U.S. grain exports, but would hinder U.S. soybean exports. For the EC, such a situation would ease a political problem because it would mean more markets for EC cereals.

Also, it would tend to eliminate criticisms about regional dislocations in the hog industry due to large differentials in feed prices because of

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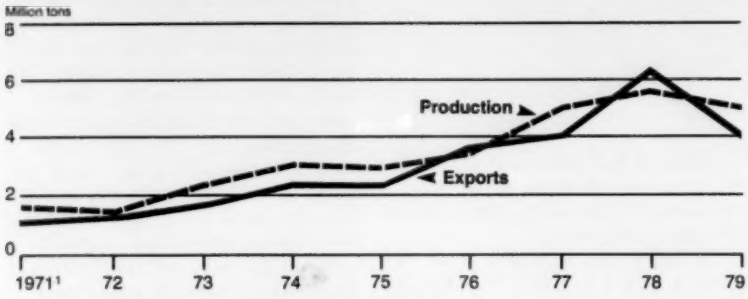
The author is an agricultural economist; Grain and Feed Division; Commodity Programs, FAS.

Thailand: Cassava Production and Exports, 1970-Preliminary 1979[1]



[1]1970/71 production (dry weight basis) matched with calendar 1971 trade.

Source: Thai Tapioca Trade Assoc., U.S. Agricultural Attaché reports.

cassava. It might also be a net benefit for the EC budget because less grain would be exported under subsidy while generally higher feed prices might cut some livestock surpluses.

Thailand's cassava exports rose sharply in 1978 to 6.2 million tons, but fell back to the previous level of about 4 million tons in 1979. The export gain in 1978 was due to a 10-percent increase in production—to 5.5 million tons—plus large carry-in stocks from earlier years. With 1978/79 production off about 10 percent—primarily because of low prices at planting time, exportable supplies were not available to maintain the previous year's export levels.

However, with some carryover stocks, actual monthly exports did not start to decline until the April-June quarter.

The 1979/80 crop, the bulk of which will be available for export during 1980, is forecast to be only slightly above that of 1979. Although area planted is estimated to be above year-earlier levels, premature harvesting of roots, plus unfavorable weather, lie behind the continued low production level.

With supplies reduced in the summer of 1979, European prices rose to new records and cutbacks in use were reported—principally in poultry feeds at first. Some compounders reported that for a 2- or 3-week period, hog feed also was made without cassava, compared with a 35-percent cassava level that had prevailed previously. More generally, the effect of the tighter supplies and higher prices was that cassava tended to be excluded from poultry rations and to drop to the 15-25 percent level in hog rations.

On a nutritional basis, a 2.0-million-ton decline in imports could mean that an additional 2 million tons of grain or more could be used by the compounding industry, while about 300,000 tons of high-protein meals would not be needed. However, actual shifts are likely to be less because more than 40 ingredients—in addition to grain and cassava—are normally considered in making up rations.

With a normal inclusion level of 35 percent and in some cases up to 50 percent in hog rations, higher cassava prices mean higher prices for feeds. Reports from the Netherlands indicate that the ingredient cost of hog rations rose about 20 percent between January and August 1979. Overhead costs, processing and distribution costs, and profit margins are not covered in that category, so the final cost of feed to the farmer, although up, probably did not change as much.

Prior to 1965, most world trade in cassava was directed toward the starch and food markets with little going into animal feed. However, after 1965, implementation of the EC's Common Agricultural Policy created the economic potential for cassava to be used in animal feed—with cassava usually replacing grain.

Once the markets opened, growth in cassava use was very rapid, leading to larger and larger imports. Prior to 1970, European imports came from diverse sources; however, since then Thailand has captured an increasingly large share of the market. Cassava has never played a large role in the diet of Thailand. Thus, production has always been for the export market, and as opportunities to export have arisen, so has Thailand's production.

Most of Thailand's cassava exports to the EC have gone to the Netherlands and West Germany, which have excellent port facilities and sophisticated mixed feed industries located nearby. During the period of rapid import growth in the 1970's, analysis indicates that more use of cassava and soybean meal provided a large share of the increased energy requirements of the expanding livestock production within the EC.

Some characteristics of cassava that have kept demand for it from growing even faster include:

- Because it is a new product, some feeders have resisted using it.
- The quality of shipments arriving in Europe has been extremely variable, making it difficult for a feed manufacturer to guarantee the nutritional quality of feeds containing cassava.
- Most cassava-based products tend to be bulky and very dusty. The dust has raised environmental problems for processors and health problems in consuming animals. Its bulkiness has meant the most economic areas for use are those with good access to ports.
- Cassava pellets are almost pure starch compared with cereals that generally have 8-12 percent protein. Thus, use of cassava requires that extra protein be readily available at a reasonable price.

Despite these problems, Thailand's cassava production and trade grew rapidly between 1970 and 1978. During this period, annual rates of growth were roughly 20 percent for production and 30 percent for trade. In contrast, exports from other countries have tended downward over the period.

An additional factor that has helped cassava trade in recent years is the decline of the dollar relative to the German mark. Since Thailand's baht is tied directly to the U.S. dollar, downward movements of the dollar have tended to more than offset rising prices in terms of bahts. On the import side, the decline in the dollar relative to the West German mark means that import prices have grown cheaper despite some inflation in both the Netherlands and West Germany. □

Latest Australian Wheat Plan To Have Largest Impact On Domestic Production

By Lynn Austin

The latest Australian Wheat Stabilization Plan—the seventh one in the past 30 years—is notably different from previous ones and could lead to significant changes in wheat production and consumption in Australia—the world's third largest exporter of wheat.

The new wheat pricing policy—approved last November—applies essentially to all wheat marketed in Australia from December 1, 1979, to November 30, 1984. Details of the agreement had been worked out between the Ministry of Primary Industry and representatives of Australia's wheat growers over the past 2 years.

Australia ships about 15 percent of the total world wheat exports. World demand is relatively inelastic, so changes in Australia's wheat situation can effect world prices. The new Wheat Stabilization Plan has altered the guaranteed minimum price formula of the old plan and relaxed some domestic marketing restrictions.

The major impacts of the new pricing plan will likely lead to an increased production of 1.5 million tons or more. The new marketing system may cause a similar increase in domestic consumption. Thus, the effects on U.S. agriculture will likely be less on wheat and more—but still slight—on products of which wheat is an input, such as beef.

Wheat price stabilization is not new to Australia. Forty years ago when the Australian Wheat Board (AWB) was formed, legislation was passed putting all harvested wheat, not fed on the farm, in its hands. During World War II, close control was exercised by the AWB on producers in order to limit production because shipping was blocked.

After the war, as Europe regained its ability to produce grain, world wheat prices declined. Accordingly, in 1948 the AWB devised another support system for wheat with a certain price guaranteed for a specified quantity and quality. The scheme or plan lasted 5 years. Subsequently, four other similar plans were adopted, each for 5 years. Usually the quantity specified exceeded the quantity produced, so there was no effective restriction.

In 1974, a significant change occurred. The price was "stabilized" at a given level. That is, if the price received by the AWB was below the set price, the Government paid the difference to the farmers. If the average pool price received was above the set or stabilization price, the farmers paid the excess into a fund to be used in future low-price years. In addition, the quantity restriction was lifted. All wheat was subject to the stabilization plan.

But wheat growers felt that they were not given the economic rewards for their labors in high-price years. In fact, in every year since 1974 the stabilization price has been below the average export price received by the AWB, so the growers ended up paying into previous pools, dampening the price incentives.

The New Scheme

The new plan incorporates both pricing and marketing changes. Producers receive a guaranteed minimum price (GMP), also called a "first payment," for their wheat upon delivery.[1] The price is based on the estimated average of the pool returns for the past 2 years and the projected return for the current season. It is calculated annually and effective from December 1 to November 30. However, there is a 15 percent limit on GMP movements from year to year.

The new formula results in a first payment much higher in relation to the total pool return than under previous plans.[2] That is, the payments made after the first payment are relatively less important under the new plan than under the old plans (see table, page 12). The 1979-84 scheme allows farmers to receive about 95 percent of their total return at harvest.

Two other important pricing changes involve domestic prices. A formula has been designated to calculate the domestic price of wheat for food use. The price for the 1979/80 season was set by the AWB at $A127.78 per ton, but subsequent prices will be determined by a formula that accounts for costs of production and previous domestic and export prices. The old method did not consider the price of wheat for export. The maximum movement in domestic food wheat prices from year to year is 20 percent.

The price of wheat for feed will be set by the AWB in line with other feedgrains. Previously, the domestic price of wheat for feed was the same as that for food. For example, during the 1960-76 period, the price of feed wheat averaged 35 percent more than the feed barley price. Although wheat is a superior feed, such a price differential is difficult to justify.

In addition to pricing changes, new rules have been passed affecting the physical marketing of wheat. In particular, the restriction that only the "AWB or its licensed agents" may purchase wheat has been lifted.

Beginning December 1979, wheat growers may deliver grain directly to local millers, feeders, or industrial users. However, the purchasers must

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[1] On a per ton basis, minus $A2.50 for the Wheat Stabilization Fund, $A0.20 for the wheat research tax, about $A11.40 holding and storage costs, about $A11.30 for transport, and about $A0.70 for AWB administration. Total expenses deducted are about $A26.10—or $A0.79 per bushel. For the 1979/80 season, the effective average first payment will be $A88.61 per ton or $A2.67 per bushel. The current exchange rate is approximately $1.00 Australian=$1.10 U.S.

[2] The total annual return is the actual price received by farmers and is based on a weighted average of domestic and export sales. Payments are made to growers subsequent to the first payment until the total pool return is paid. The process can take as long as 4 years.

have advance permission from the AWB. This should save considerable shipping costs and reduce transport bottlenecks.

Furthermore, wheat growers are now allowed to harvest wheat in one location, ship it to another point, and use it as feed. Both wheat farm and animal operations must be under the same ownership.

In the past, the AWB borrowed from the Rural Credits Department of the Reserve Bank to make the initial payments to farmers. This will continue. The loan is still only for 12 months, but now the debt will be refinanced by a new Growers' Financing Fund (GFF). The Fund will be established by a $A2.50 per ton "contribution" on all wheat delivered to the AWB. In case the GFF is insufficient to cover the debt, the AWB could also be asked to secure funds from commercial markets during the 12-month period, as it was during the 1978/79 season.

Under the former wheat plans, the stabilization fund had accumulated $A80 million, the maximum allowed. The funds have been transferred to the GFF, which has a limit of $A100 million. Any excess will be returned to growers in the form of pool payments, beginning with the oldest pool first. Unlike the stabilization fund, the GFF is not used to make up any negative difference between the net pool return and the guaranteed minimum price. The Government, through its general tax revenues, is now responsible for the guaranteed price.

Impact on Production

The higher first payments, which farmers find the most attractive, may have an effect on production. Taking the years 1973/74-1979/80 as examples, the average increase in first payment would be 32 percent. Based on studies of supply in Australia, larger first payments could result in an increase in output of 16 percent—or 1.5 million tons.

Admittedly, the total return is important in terms of covering costs, but when payments are strung out over 3 to 4 years the real return is considerably less than the nominal rate. For instance, if payments for the 1973/74 pool had been discounted at an annual rate of 12 percent to account for inflation, the real return would have been less than $A94 per ton instead of the nominal $A104. It is thus realistic to expect some supply response to the significantly higher first payment.

On the other hand, the new funding arrangement—with each ton delivered to the AWB automatically taxed $A2.50—will deter production. The stated GMP is thought of as $A2.50 more than the "actual GMP." However, at current prices, this represents only about a 2 percent reduction in price.

The new ceiling of $A100 million also could be expected to deter output, but since the fund is already 80 percent full, only the tax on the next 8 million tons of wheat (less than a year's output) will not be returned to the growers. So, even the relatively unimportant impact on the effective price by the fund tax is mitigated by the fund limit.

Taking into account all these factors, the new scheme could result in a significant increase in wheat production.

Impact on Consumption

Until now, the AWB price of feed wheat had been the same as flour wheat consumed domestically. Only in years when feedgrains were high priced—as in 1972-75—did wheat gain as a livestock feed. This led to considerable amounts of feed wheat being traded outside of the AWB jurisdiction. The new pricing scheme, which considers other feedgrain prices, could lead to an increase in the quantity of wheat used for feed—provided Australians continue to increase consumption of poultry, eggs, and pork, and more importantly, if the world price of beef remains relatively high, since cattle are the primary consumers of feed wheat. The exact amount of feed use of wheat will depend upon where the AWB fixes the price.

Another impetus to the domestic consumption of wheat comes from the new relaxed marketing arrangements. Users can literally buy wheat across the street. This would eliminate only a small portion of the handling costs since farmers and buyers of wheat must still pay the fixed cost of the local grain handling authority as if the wheat had actually been shipped through the local authority. Transfer of the wheat, however, will be facilitated under the new plan.

Finally, wheat growers now have the option of feeding their own wheat on their own feed enterprises located away from the farm. In the past, wheat could only be fed on the property where it was grown. The new provision will be particularly significant for large integrated operations, allowing them to bypass AWB delays.

Although the domestic marketing provisions are considerably more favorable to Australian users, their impact on the total wheat disposition will be negligible. If domestic consumption of wheat were to increase by 50 percent, which is not likely, the increase in the amount consumed would be less than 1 million tons. □

Comparison of the First Payments Under the Old and New Wheat Schemes, Australia, 1973/74-79/80[1]

Year	First Payment		Change
	Old Scheme	New Scheme Guaranteed Minimum Price	
	Aust.dol.	*Aust.dol.*	*Percent*
1973/74	44.09	64.17	46
1974/75	44.09	81.97	86
1975/76	55.12	99.03	80
1976/77	66.00	[2] 94.57	43
1977/78	66.00	[3] 91.18	38
1978/79	73.49	[4] 93.23	27
1979/80	87.96	114.71	30

[1] This compares the actual first payment (old scheme) from 1973/74-1978/79 with first payments that would have been paid had the GMP (new scheme) been in effect. For 1979/80, the GMP now in effect is compared with an estimate of the first payment that would have been under the old scheme. [2] Assuming total returns were $A95.98 for 1975/76-76/77. [3] Assuming total returns were $A95.98 for 1975/76-77/78. [4] Assuming that the 1978/79 GMP price would have been greater than the 1977/78 GMP in proportion to the average export prices of 1976/77-78/79 and 1975/76-1977/78.

Subsidies Help Boost EC Farm Exports to OPEC

By John B. Parker, Jr.

The European Community (EC) has emerged as the major supplier of agricultural products to the world's most dynamic boom market—the petroleum-rich members of the Organization of Petroleum Exporting Countries (OPEC).[1]

During calendar 1978, OPEC was a $2.9 billion market for EC farm products, and that figure probably grew to about $3.6 billion in 1979. By comparison, the United States in fiscal 1979 (Oct.-Sept.) shipped about $2.2 billion worth of farm products to OPEC, for a mere $66 million gain from the previous year, as competitors such as the EC enlarged their respective shares of the market at the expense of U.S. trade.

EC success can be laid in part to geographic proximity to many OPEC countries, plus traditional ties with nations that once were colonies of EC members. Perhaps more important, however, have been the generous subsidies used by the EC to foster export sales of agricultural products, particularly poultry products and further processed foods. These subsidies have enabled EC exporters to undercut U.S. suppliers, even though production costs in the EC generally are above those in the United States. Frozen EC chicken, for instance, carries a subsidy of about 14 to 18 cents per pound, depending on the exporting country, enough to keep U.S. product out of price-conscious OPEC markets.

In times of abundant EC grain supplies, wheat flour and wheat also have benefited from EC subsidies, which can go as high as $110 per ton for wheat. Such subsidies vary from market to market.

As with the United States, EC agricultural exports to OPEC began to soar after the 1973 hike in world petroleum prices and subsequent sharp gains in purchasing power of OPEC nations. Trade figures illustrate the results—$721 million worth of EC agricultural exports to OPEC in 1973, followed by $1.1 billion in 1974, $1.7 billion in each of the next 2 years, and then $2.5 billion in 1977. Trade has continued to expand in the last 2 years, with strong gains in items such as frozen poultry, dairy products, barley, live animals, and processed foods.

During 1973-75, EC agricultural exports to all the Middle East OPEC markets except Iran and Iraq were greater than U.S. agricultural exports to the region, and by 1976 and 1977 the EC had surpassed the United States in sales to Iraq also. EC shipments to Iran lagged behind U.S. exports through 1978, but the recent political problems with Iran suggest that U.S. ascendancy in that market also is ending.

Nigeria so far ranks as the leading OPEC outlet for EC agricultural products, taking $640 million worth in calendar 1978, compared with $523.5 million in 1977 and only $93 million in 1973. This probably is one of the most price conscious of the OPEC nations because of its frequent trade deficits and need to allocate foreign exchange for imports of specific commodities. As a result, it may find EC subsidies particularly attractive.

Nigeria's longstanding ties with the United Kingdom also may have enhanced trade, just as France's ties with former colonies such as Algeria and Gabon have given French exporters a strong foothold in those markets.

Among the other top OPEC recipients of EC farm products are Saudi Arabia, taking $522 million worth in 1978 (and $408 million in 1977); Iran, $344 million ($274 million); Venezuela, $273 million ($210 million) and Libya, $230 million ($302 million).

Even those areas with small amounts of land and/or populations have boosted imports tremendously. EC sales to the tiny United Arab Emirates, for instance, now exceed $130 million annually.

The Community has been particularly successful in the export of dairy products, meat, and processed foods to OPEC. Large sales of such products reflect, of course, the availability of ample EC supplies for export, as well as the subsidies on dairy products and meat. EC exporters also have been highly aggressive in marketing their products—sometimes receiving member-country assistance in these activities—and may have been more willing to accept smaller orders than have U.S. shippers. In the future, however, containerized shipping of processed foods should help the United States compete more effectively with EC suppliers.

EC exports of dairy products to OPEC rose from $147 million in 1973 to $484 million in 1977 and surpassed $600 million in 1978. Shipments to each of five OPEC members exceeded $70 million in 1977—Nigeria, $99 million; Venezuela, $89 million; Algeria, $80 million; and Iran, $71 million.

Striking gains in EC shipments of nonfat dry milk to OPEC are related to expansion of school lunch programs, in which free or subsidized milk is

[1] Algeria, Ecuador, Gabon, Kuwait, Libya, Indonesia, Iran, Iraq, Nigeria, Qatar, Saudi Arabia, Venezuela, United Arab Emirates.

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provided for millions of schoolchildren.

The only competitor of note in this dairy product market is Australia, which shipped $70 million worth in 1977 against $24 million in 1973. However, Australian deliveries still are small relative to those from the EC, reflecting in large part the heavy EC subsidies.

EC exports of fresh and frozen meat to OPEC reached a record $144 million in 1977, or nearly five times the $32 million shipped in 1973. They then dipped to $142 million in 1978.

Frozen poultry has accounted for most of the EC's meat exports to OPEC. These shipments expanded from 21,252 tons in 1973 to 117,256 in 1977, again with the help of substantial subsidies.

France Dominates Poultry Trade

France, with its abundant supplies of poultry products for export, has played a lead role in this trade. During 1978, for instance, it shipped an estimated $100 million worth, compared with only $12 million in 1973.

Saudi Arabia usually receives slightly over half of all EC exports of frozen poultry to OPEC, and the Gulf sheikdoms account for another fourth. Iraq, in contrast, has been a better market for poultry from the United States, Brazil, and Hungary, than for that from the EC.

EC exports of beef to OPEC jumped from only 364 tons in 1973 to 14,945 in 1977 and about 20,000 in 1978. Largest markets during 1977 were Algeria and Iran, whereas by 1979 sales to Iran had declined while those to Algeria, Saudi Arabia, and the UAE increased.

Exports of canned meat to OPEC probably approached 35,000 tons in 1979, with 20,000 going to Saudi Arabia alone. Purchases of canned meat for distribution to immigrant workers have expanded sharply in recent years in Saudi Arabia, the UAE, Kuwait, Qatar, and Libya.

Rising demand for meat has caused some OPEC members to bolster their own livestock industries. To support these expanding enterprises, countries such as Libya and Algeria have become large importers of mixed feed. Total EC shipments of mixed feed to OPEC rose from 164,726 tons in 1973 to 626,322 in 1977, with Libya taking 512,422 tons of the 1977 volume.

The EC also has enjoyed some success in boosting exports of grain to OPEC, although it still lags far behind the United States as a supplier. The Community is a net importer of rice, corn, and oilseeds, and only in years of abundance does it have sizable quantities of wheat for export. When wheat supplies are ample, however, the EC can be an aggressive competitor in view of its large subsidies on wheat and wheat flour exports.

EC exports of wheat flour to OPEC fluctuated from 721,317 tons in 1975 to 540,402 in 1976, to about 800,000 in 1978. Sales to Algeria—far the largest market—ranged from a low 6,962 tons in 1973 to 353,925 in 1975, and went on to set a new record of about 500,000 in 1979.

Algeria at times also has been a sizable wheat market—257,524 and 270,489 tons, respectively, in 1974 and 1975—but EC shipments there slipped to zero in 1976 and 10,011 in 1977. EC sales of wheat to all of OPEC totaled only 57,416 tons in 1977, but gained in 1978 and 1979 following abundant crops in the Community.

Algeria likewise is an important OPEC market for EC dry beans and peas, as are Libya and Venezuela. In 1979, however, the United States provided more than 40 percent of the 70,000 tons of pulses imported by Algeria.

EC exports of barley to OPEC rose from 22,108 tons in 1976 to 110,430 tons valued at $12.3 million in 1977 and remained above 100,000 tons in 1978. Shipments to Algeria, Iran, Iraq, and Kuwait probably rose further in 1979.

EC exports of refined sugar to OPEC rose from 148,856 tons in 1975 to 648,860 in 1977. Yet the decline in sugar prices held the gain in value to only $35 million during this period as the value of EC sugar exports to OPEC edged up to $221 million in 1977. Nigeria received almost half of the EC sugar exports to OPEC that year, and Iran, about a fourth. Then in 1978, value and volume gains pushed the EC exports of sugar (and honey) to $330 million.

Apple Sales Gain

Lebanon's difficulties in delivering apples to traditional Middle Eastern customers in 1976 contributed to a boom in French and Italian apple shipments that year. EC exports of apples to OPEC rose from 32,803 tons in 1975 to a peak 85,091 in 1976, but slipped to 70,973 tons in 1977 because of smaller harvests in the Community.

Iran, Iraq, and Saudi Arabia received most of the EC apple exports to OPEC during 1976 and 1977.

During 1978, the EC managed a slight gain in apple shipments to the Arabian Peninsula, despite rising competition from the United States, Chile, and Eastern Europe.

EC exports of vegetables to OPEC expanded from 76,793 tons in 1973 to 151,099 in 1977. Algeria was far the largest market, taking 97,558 tons in 1977, compared with 63,446 in 1973.

The diversity of EC agricultural exports to OPEC also is reflected in shipments of school lunches from the United Kingdom and France. Gains in such exports have boosted total EC sales of bakery products and processed foods to OPEC. □

European Community: Agricultural Exports to OPEC, Annual 1973-78

(In thousands of dollars)

Exports	1973	1974	1975	1976	1977	1978
Algeria	136,301	262,097	393,538	216,393	329,652	390,621
Ecuador	5,886	10,184	9,240	9,272	12,772	17,721
Gabon	16,934	21,678	30,799	38,039	48,130	43,858
Indonesia	26,255	53,806	42,643	38,624	49,970	48,692
Iran	55,551	87,263	199,320	180,181	274,325	344,167
Iraq	22,073	33,952	51,708	75,118	90,625	113,217
Kuwait	51,785	60,713	67,731	91,964	102,545	120,003
Libya	123,409	181,159	213,855	216,534	301,878	230,081
Nigeria	93,095	119,720	277,588	337,165	523,496	639,315
Qatar	6,236	9,485	9,448	16,485	17,870	26,039
Saudi Arabia	85,928	115,183	187,584	260,234	407,545	522,321
Venezuela	69,711	76,963	146,551	130,136	210,525	236,730
United Arab Emirates	28,010	43,047	56,361	103,183	109,356	130,980
Total	721,174	1,075,251	1,686,366	1,713,328	2,478,689	2,863,745

Source: United Nations trade runs.

Documentary Collections:

Smaller Exporters Take a Second Look

By Robert Scholle

To many, the letter of credit (L/C) has come to be synonymous with financing in the world of export trade. As in all undertakings, however, there is more than one way to establish trade partnerships, and often it pays to explore the options.

So it is with the letter of credit—admittedly safe and widely accepted but also expensive and sometimes difficult to obtain. As an alternative, numerous exporters do business by a method called documentary collection—also commonly known as "cash against documents" or "payment upon presentation of documents."

The confirmed letter of credit offers an exporter the opportunity to sell a product without assuming any credit risk. It is normally negotiated at a U.S. bank on the basis of the documents presented, and the exporter receives payment without recourse. The confirming bank assumes the credit risk, thereby compensating for the uncertainty inherent in doing business with importers far from home.

Each bank, both the importer's (opening) and exporter's (confirming), intercedes for the parties, using their correspondent relationships to assist the transaction.

In the past, the importer was able to obtain an L/C based primarily upon his financial standing. Banks viewed this credit facility in much the same manner as if the importer had requested a loan.

Today, however, an importer's ability to obtain L/C's hinges on some additional considerations. For instance, severe restrictions are often placed upon importers in countries where foreign exchange reserves are minimal. The most likely restriction is a cash collateral deposit required of the importer requesting an L/C. These deposits generally are interest-free, effectively making the L/C more expensive to obtain.

The documentary collection system, although time-tested and used continuously, has never really received the attention it deserves. Many people incorrectly believe that such transactions are smaller in dollar volume than L/C transactions. In actuality, many bulk commodity sales of $250,000 and above are made via documentary collections. Moreover, a number of experts in the banking and export business contend that documentary collections are more the rule for agricultural exports than are L/C's.

Procedures in the documentary collection system are relatively uncomplicated. An exporter ships his goods while sending the documents separately, either directly to the importer or through the importer or through the exporter's agent or a bank. In the latter instance, the bank acts as the collection agent and should not turn over the documents to the importer until payment is received and/or assured.

The major risk accepted by an exporter is the possibility of the importer not retrieving the documents, thereby leaving the commodities stranded at a foreign dock. While the exporter, or his agent, would maintain title to the goods, the cost and time involved in finding another buyer could be substantial. Such a risk increases, of course, when prices are volatile and the commodities perishable.

Probably more than anything else, the key to success here is mutual trust on the part of exporter and importer. Such relationships can be established with time and reputation; consequently, exporters may first want to use L/C's and then switch to documentary collections once they have a network of reliable importers.

The significant financial instrument in documentary collection is the export draft. This draft is primarily an unconditional order drawn by the exporter (drawer) on the importer (drawee) or the importer's bank, instructing him to pay the amount of the draft either upon presentation (sight draft) or at an agreed-upon future date (time draft).

Time drafts are commonly spaced at 30-day intervals, such as 60 days "after sight" (after presentation) or 120 days "after date" (after the date of the draft).

In many cases, the exporter's bank is named as the party to whom payment should be made. Most U.S. agricultural exporters, in fact, have their collections routed through a U.S. bank, which acts as an agent for the exporter in dealing with a foreign paying bank and the importer.

As in most other transactions, both domestic and international, additional documents besides the draft accompany the transaction. Many banks have standard collection forms for use by exporters.

Essentially, the exporter is instructing the bank to perform two major functions. The first function is to route documents to the intended recipients and make whatever followup is needed; the second is the collection of funds. Simply stated: paper out, money in.

In the case of a sight draft, the instructions to the collecting bank should read "D/P" (documents against payments), meaning the documents are to be released to the importer or the importer's bank on payment of the draft. With a time draft, the instructions should read "D/A" (documents against acceptance),

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meaning the documents should be released when the importer accepts the draft.

Banks performing these services generally either charge a flat fee per transaction or a percentage of the collection amount. Depending upon the exporter's relationship with his bank, several variations of each method are available. In any case, it is important for the buyer and seller to have prior agreement as to who pays for incidental and miscellaneous charges.

As with L/C's, banks often offer exporting clients loan facilities associated with these transactions. The bank's credit risk, in either case, (pre-export loans against either an L/C or documentary collections) lies with the exporter and his capability for performance. These loans are often called advances against documentary collections or pre-export loans and are short term in nature. Acceptance financing is also widely used as a credit vehicle for exporters selling on a documentary collection basis.

Because of the risk involved in documentary collections, banks will normally advance around 80-90 percent of the invoice value. The margin between the invoice price and the advance should cover the contingency of loss should the exporter have to resell the goods at a lower price than anticipated.

Depending upon their relationships with the exporter, and the nature of their internal operations, banks will normally either treat each transaction as self-liquidating or group all the collections and lend a percentage of the total. Unless the bank is willing to buy the draft outright (as when the importer is a major, well-known company and/or the U.S. bank has direct dealings with the importer), these advances are based upon the credit standing of the exporter, and banks have recourse to the exporter.

The reverse side of a documentary collection transaction entails the instructions to remit the proceeds. Herein lies a major problem. The concept of a rapid collection assumes the existence of a foreign branch network of a U.S. bank and/or an extensive group of foreign correspondent banks. A smaller exporter with no ties to a large bank must often rely on local or regional banks to initiate the transactions.

Technically, a sight draft may be presented for payment—or a time draft for acceptance—as soon as received by the collecting bank.

If the exporter is willing to authorize a delay in presentation until the goods actually arrive, the letter of instruction should state that the collecting bank may "hold for arrival of merchandise." However, many overseas banks will do so even without formal instructions.

Previously, the time necessary for the documents to reach the importer was more or less equal to the time necessary for shipment and receipt of the goods. Hence, the importer did not have to pay for commodities long in advance of receipt and was not hampered in reselling the commodities quickly.

Today, with major banks having their own or contracted global air courier services, documents arrive considerably ahead of goods. This is glaringly true in the newer markets of the Middle East, where both transport time and docking delays might prevent the importer from receiving his goods by as much as 90-180 days after receipt of documents.

Such situations have led to a modification of the historic precedent of payment against documents. For lack of better terminology, it might be called the "gone fishing" method. In simple terms, this means the importer does not come in to pick up the documents, and thereby effect payment, until the ship arrives. Technically, he has not dishonored his commitment since he has not refused the goods; he has only gone fishing and is unable to pick up the documents.

From the importer's viewpoint, it would be foolish to pay for goods long before receipt. Exporters, nevertheless, expect to be paid upon receipt of documents. Banks caught in the middle have been accused of "sitting on the money."

Exporters taking a closer look at the reasons for delayed payment will often find the gone-fishing theory to be the root of many of their problems. Smaller exporters have the most difficulties since their local bank may not have a direct banking correspondent network abroad, and may have to rely upon a larger U.S. correspondent bank to act on its behalf.

These realities indicate that most documentary collections in the future will take a longer time for collection and that payment upon presentation of documents will come to mean "payment at a later date."

Exporters, in turn, may change their pricing policies to allow for the extra expense of carrying the importer (and the interest charges) for a longer period. Exporters also may start requesting longer terms on loans from their banks in order to continue turning over new business.

Since using documentary collections could result in considerable savings on fees, there is a certain amount of flexibility in an exporter's passing on costs. For exporters exploring the possibility of using D/C's, the following checklist is a good starter:

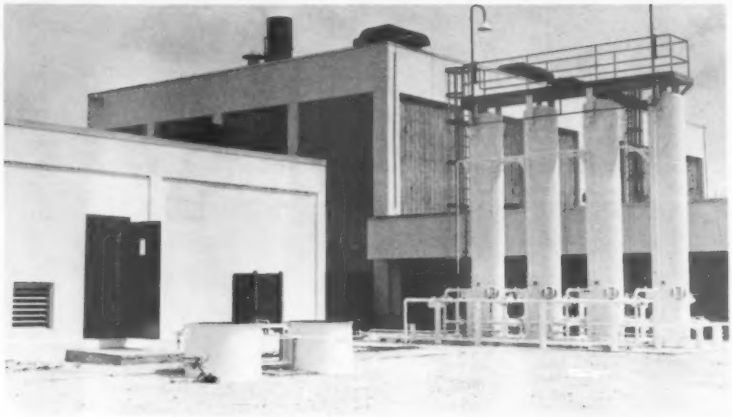
- Do you now export or plan to export to country(ies) where there are significant charges levied upon importers for opening L/C's?
- Do you feel comfortable enough with the importer and his reputation to try documentary collections?
- If you have no problems with the importer, do you want to assume the risk of the importer's country holding back on currency conversion permission?
- Can you determine just how long you are prepared to wait for your money and whether the transaction is worth doing?
- Can you arrange financing to carry you from the time the export is made until payment is received if the gone fishing theory is in effect? Are you able to pass these finance charges along and still remain competitive?
- How does your industry operate? Do they use L/C's, D/C's, or a combination of both?
- Does the importer normally use D/C's and would your requesting an L/C reduce your chances of completing the transaction?
- Is it worthwhile for you to explore the area of exporter's insurance?

While the risks of the documentary collection system are admittedly greater than for the L/C, the financial savings also could be sizable. For agricultural products, the interchangeability of such methods is high—only livestock need be sold exclusively via confirmed letters of credit.

Consequently, the choice comes down to the expediency and reliability of the L/C, versus the lower cost and wider potential for use of documentary collections—a choice that should be made only after careful study on the part of the agricultural exporter. □

New Quarantine Center Operational

Florida Facility To Handle Up To 800 Animals a Year



Exterior views of the quarantine building at the Harry S Truman Animal Import Center at Key West, Fla. Opened in January, the facility will process up to 400 imported cattle per quarantine cycle. Two cycles will be run annually.

The Harry S Truman Animal Import Center, located on an island abutting Key West, Fla., went into operation in January with the start of a quarantine cycle involving up to 400 animals. Dedicated in late October, the Center will be used to quarantine and clear breeding stock imported from countries otherwise prevented from shipping cloven-hoofed animals to the United States because of the presence of foot-and-mouth disease.

The U.S. livestock industry has wanted for some time to import breeding animals from a number of these countries to introduce new bloodlines in their livestock lines. The opening of the Truman Center will give it this opportunity.

Administered by USDA's Animal and Plant Health Inspection Service (APHIS), the Center is located on U.S. Navy property on Fleming Key, just across a restricted bridge from Key West. It can handle two groups of 400 cattle per year, based on a 5-month testing and isolation period for each group with 1 month between shipments for cleaning and disinfecting the facilities. A staff of about 40 people, including veterinarians and animal caretakers, will work at the Truman Center.

The Center is 60 miles from the mainland and about twice that distance from Florida's livestock-raising regions—but still provides excellent facilities for receiving animals by air or sea. Because of this restricted location, the Center provides facilities secure from entry by unauthorized animals or people, and can effectively isolate the animals under quarantine.

Efforts are being made to ensure that only disease-free livestock are brought to the Center. Pre-entry screening includes verification of each animal's age, to make sure that it falls, within the limitations, reviews of the animal health situation in each country of origin, and the health status of the source herd. APHIS also ascertains that each animal has undergone an isolation and test period on the source farm, and an isolation period of at least 30 days in a USDA-approved overseas embarkation station where tests are run for certain diseases.

In addition to the imported animals undergoing quarantine, the Center also will house up to 100 test cattle and the same number of test swine from the United States. Testing for some diseases will be conducted at the Center's laboratory. More complex diagnostic work will be done at USDA's Plum Island Animal Disease Center, off the coast of Long Island, N.Y.

Once animals enter the Truman Center, they will remain in pens inside the building where they will undergo daily scrutiny and disease tests, as required. After the 5-month observation period, animals that have successfully passed the quarantine requirements will be released to their owners without further Federal restrictions.

All expenses connected with the Center, including maintenance, operation, feeding and bedding the animals, and personnel salaries will be paid by importers using the facilities. □

U.K. Boosting Winter Grain Yields Through Intensive Planting Practices

As is the case in other countries, U.K. agricultural production costs are increasing and farmers are seeking ways to beat the squeeze on profit margins. Grain farmers in the United Kingdom have kept ahead of rising costs, at least for the moment, by sowing more high-yielding varieties of winter wheat and barley and maximizing per hectare yields.

While U.K. farmers are mainly interested in getting the largest grain outturn for the least money, others in the United Kingdon may see the yield gains in the possible long-term context of reducing grain imports. And since the United States is one of the United Kingdon's most important grain sources, this view is of major concern to U.S. exporters.

U.S. grain exports to the United Kingdom consist of wheat and barley—the two winter grain crops whose yields are being pushed upward—as well as corn, rice, and oats. In 1978/79, total U.S. grain exports to the United Kingdom amounted to 3.66 million metric tons, of which 300,000 tons were wheat. In 1977/78, U.S. grain shipments to the United Kingdom were 3.68 million tons, 202,000 tons were wheat.

Interest in producing grains in the United Kingdom is growing more intense for, since the United Kingdom joined the European Community in 1973, grain has become one of that country's most lucrative agricultural crops. Farmers were assisted by market prices which have kept up with rising production costs—at least until the 1978 harvest.

More recently, however, inflationary pressures, partially because of mounting labor costs and 1979's petroleum price rises, have begun to squeeze cereal profit margins. But, ironically, rising prices also have forced farmers to adopt intensive growing practices which, in turn, have led to larger yields per hectare. Moreover, declines in the relative profitability suffered by some livestock and horticultural producers have caused them to switch to grains, sometimes relatively easy in the United Kingdom's predominantly mixed farming economy.

In recent years, fixed costs of cereal production such as rent, interest, fuel, and labor have risen comparatively more rapidly than such variable costs as sprays, fertilizers, and seed. In the grain-growing context, labor and fuel costs tend to be viewed more as fixed cost than as variable, inasmuch as it does not take much more fuel and labor to increase per hectare seeding rates.

Because of several reasons—including rises in common EC prices and successive green pound devaluations—the average U.K. ex-farm price for wheat rose by nearly 42 percent between 1974 and 1978—from £59.82 per ton to £84.80, while the average ex-farm price of barley rose by nearly 35 percent from £57.62 per ton to £77.70.

Although over the years hardly any grain grown in the United Kingdom has gone into intervention, the intervention system itself encourages farmers to maximize yields. This, coupled with the lack of penalties for overproduction, has meant that farmers have every reason to grow as much as they can.

Thus, the tendency in the United Kingdom is to grow grain under ever more intensive farming systems with dense plantings (for winter barley, for example, the seeding rate is as high as 188 kilograms per hectare) and extensive use of fungicides and herbicides—often two or three applications per growing season. Several applications of fertilizer also are made.

These practices have sent wheat production up from 4.7 million tons in 1976 to 6.6 million tons in 1978. Barley outturn rose from 7.6 million tons to 9.8 million tons in that period, while total grain production climbed from 13.3 million tons to 17.3 million.

Between 1968 and 1974, average wheat yields rose by 40 percent—from 3.55 tons per hectare to 4.97 tons—while the average yield of barley went up by 20 percent—from 3.44 tons to 4.13 tons. Yields of both grains fell considerably in the next 2 years because of drought, with the 1976 levels tumbling almost to those of 1968. Normal weather in 1977 again started the upward motion, and—although in 1978 the barley yield average slipped somewhat—wheat topped the 5-ton mark for the first time.

An analysis of the 1978 cereal crop by the Ministry of Agriculture's Agricultural Development and Advisory Service (the U.K. equivalent of USDA's Extension Service) shows that new wheat varieties have contributed strongly to the climb in yields, with use of advanced methods of weed, pest, and disease control playing their parts.

Generally speaking, cereals in the United Kingdom yield better when sown before December 31 and, traditionally, most wheat is planted before Christmas. The United Kingdom's geographical and climatic situation favors pre-Christmas wheat sowings because much of it is cultivated in east and southeast England, where the harvest is early and in most years the last 4 months tend to be fairly dry. There is, therefore, plenty of time between the harvest and onset of bad weather in the new year to clear the land and till and sow it.

Plantings of 1979/80 winter cereal crops were virtually completed by mid-November, largely because of ideal conditions through large parts of the growing region. However, some areas were reported to be in need of additional moisture.

In contrast to 1979's near ideal sowing conditions, 1978's were characterized by a lack of fall moisture, which slowed drilling operations and resulted in delayed plant development.

In 1979, with the early completion of winter sowing and consistent reports of excellent seedbed development, the young plants were expected to be

From top: Spraying cereal crop in Leicestershire, United Kingdom; plant specialists examining new strain of barley in U.K. plant breeder greenhouse. High-yielding varieties of winter wheat and barley have helped British grain farmers keep abreast of inflation by boosting grain yields.

well advanced before the winter began. Such early development suggests they will be less susceptible to harsh winter weather, leading in turn to stronger plants in the spring, better able to resist attacks by pests and diseases.

Increasing amounts of winter barley have been planted in the United Kingdom in recent years. It is estimated that sown winter barley area in England for harvest in 1978 was between 400,000 and 500,000 hectares, while in 1979—when official winter barley figures were collected for the first time—the area was 560,000 hectares. Winter barley—with its earlier ripening—is less susceptible to summer drought, which is one factor in its favor.

On the other hand, even in those areas where all the wheat is sown by winter, some farmers are reluctant to sow winter barley. There is not only the normal conservatism of many farmers, but the work of simultaneously preparing fields for both barley and wheat is just too much, particularly during times of labor shortages.

Even in areas away from the major wheat regions—especially in the west and north of England, where there is no competition for farmers' time between wheat and barley, the late harvest means there is even less time to prepare for autumn-sown crops. Autumn cultivation and sowing conditions tend to be less favorable in the west and north, in any case. But, there is a real possibility more winter barley may ultimately be sown in northeast England and east Scotland.

The prognosis concerning the future of the United Kingdom's winter wheat and barley crops is that yields will continue to climb and area may increase slightly.

The United Kingdom's average wheat and barley yields—5.16 tons per hectare for wheat in 1978 and 4.19 tons for winter barley—are among the highest in the world, surpassed in some years only by those in Belgium and the Netherlands, both of which have more uniform weather than the United Kingdom.

On certain U.K. farms, in regions having optimum conditions, wheat yields of 10 tons or more per hectare are becoming more common. While it is probably unreasonable to expect an average countrywide wheat yield of 10 tons per hectare and a barley yield of, say, 9 tons, it is likely that larger than present yields of both grains may result from more intensive and better managed cereal farming on those farms where yields are below the current average.—*Based on report by David P. Evans, Special Agricultural Economic Analyst, London.* □

Mexican Citrus Producers Look to U.S. Market To Absorb Bigger Output

By John H. Wilson

Mexico's citrus industry—already largely dependent on the U.S. market for much of its export sales—is increasing production and is looking to the United States to absorb much of this expanded output, both fresh and processed.

Mexican orange juice producers believe that growing consumer demand in the United States for juice will permit Mexico to supply a larger share of the U.S. market.

Mexico's exports of fresh oranges and tangerines to the United States in 1978/79 were considerably larger than in the previous year, despite the drought in 1977 and severe freezes in December 1978 that lowered production.

The drought affected all of Mexico's producing regions but was most damaging in the States of Nuevo Leon, Tamaulipas, and San Luis Potosi. The freeze was primarily concentrated in the Montemorelos-Linares citrus region of Nuevo Leon, and caused output in this area to fall from the 1977/78 level by one-third. The three drought-affected States, plus Veracruz and Tabasco in the south, and Colima and Michoacan—Mexico's major lime producing States—account for the bulk of Mexico's citrus production.

Mexico's latest official production figures are for 1977 and show citrus production of about 2.48 million metric tons: 1.86 million tons of oranges, 58,200 tons of tangerines, 112,100 tons of grapefruit, and 444,640 tons of limes.

Trade sources agree with these Secretaria de Agricultura figures, except they believe tangerine production was in the 125,000-130,000-ton range.

Despite the damage done by the drought, orange and tangerine output is expected to rebound sharply. By the mid-1980's, orange production is seen approaching 2.7 million tons and that of tangerines, 175,000 tons, largely because many new trees are beginning to bear and cultural practices have been improved.

New plantings, mainly of Valencia oranges and Dancy tangerines, were high in 1977/78 and 1978/79, encompassing areas from the southern tip of Tamaulipas State to the southwest coastal regions of the Yucatan Peninsula. Apparently, there is little room for expansion in traditional citrus area in Nuevo Leon.

Grapefruit and lime trees were least affected by the adverse weather because of their southerly location. About three-fourths of the grapefruit trees are in Veracruz and Tabasco, and the bulk of the lime trees are in Colima and Michoacan.

The rate of grapefruit tree plantings has been high since the early 1970's and production is expected to rise 50 percent from 1977 levels to about 170,000-175,000 tons by 1985. However, some industry sources have indicated that grapefruit tree plantings may be reduced substantially next season because of producer fear that a worldwide glut and a lessening of demand in the domestic market will cause market prices to fall.

A common concern among Mexican producers is the huge expansion of grapefruit plantings in Cuba. While

Fresh citrus packing line at Montemorelos, Mexico. Mexican producers of fresh citrus and citrus products are upping their output and see the United States as the logical market for this increase.

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the United States banned all imports from Cuba in 1962, Mexico is fearful that—if the ban is lifted—it may lose a share of the U.S. market.

Mexican lime production has stabilized during the past few years. The crop is divided between Key lime varieties (95 percent of output) and Persian varieties (5 percent).

All Mexican fresh citrus fruit exports pass through packing houses, of which there are 31. Twenty-six of these are located in Nuevo Leon and are members of the Mexican Association of Citrus Packers. The organization was established in 1964 to promote citrus production in Mexico and to improve quality and marketing opportunities for its members.

The fresh export market takes 1-3 percent of the country's oranges, 20-25 percent of its tangerines, 10-15 percent of its grapefruit, and about 1 percent of its limes. About 60 percent of Mexico's orange exports go to the United States and all of its tangerine shipments are to the United States and Canada.

Tangerine shipments are more or less limited to these countries because the fruit is susceptible to decay and peel injury brought on by excessive handling.

U.S. imports of fresh Mexican oranges and tangerines in the 1978/79 season (November-October) amounted to 46,096 metric tons—48 percent of the total were tangerines and 52 percent were oranges. This is a 70-percent gain over imports in the previous season.

Largely responsible for this increase were the short 1978/79 citrus crops in California and Arizona. Mexican shipments to the United States, especially of oranges, fluctuate considerably from year to year, mainly because of changes in U.S. demand and to a lesser degree because of shortfalls in Mexican production owing to frosts or droughts in Mexico's most important growing areas.

After the United States, the German Democratic Republic (GDR) is Mexico's most important orange export market. Latest official Mexican trade data (1977) show orange exports to the United States and the GDR were about evenly split at some 17,000 tons each.

Small amounts of oranges also go to the Netherlands. Mexican exporters normally ship as much fruit to the United States and Canada as they can and the balance to Europe, a market they are especially interested in enlarging.

Mexico's fresh grapefruit exports have doubled in the past few years, with the major markets being the United States, Western Europe (primarily the Netherlands and France), and, most recently, Japan. Shipments to Japan climbed from 90 tons in 1971 to 3,200 tons in 1978, exceeding the calendar 1978 U.S. import level of 1,260 tons.

Because of the early harvest in Veracruz, Mexican grapefruit hits the U.S. market 2-3 weeks before the U.S. shipping season gets underway. This gives Mexico a competitive advantage in some of its foreign markets.

Mexico hopes that, despite the anticipated larger world supplies of grapefruit, it will be able to keep its present share of the U.S. and West European markets, and increase its exports to Japan in the early part of the marketing year.

U.S. imports of Mexican limes have trended upward from 3,080 tons in 1974 to a record 12,330 in 1978. The increase is attributed to larger Mexican supplies of Persian variety limes, coupled with a drop in U.S. output, which fell from about 40,000 tons in 1974/75 (April 1-March 31) to 19,000 tons in 1978/79.

U.S. lime imports from Mexico continued at a relatively high level in the first 11 months of calendar 1979 (11,642 tons compared with 10,351 tons during the same period in 1978).

Because of a belief that U.S. orange juice demand will remain strong and Mexican orange production will climb, Mexican orange juice processors are increasing the number of processing plants from the existing nine—six of which produce juice concentrate—to 15 by 1981/82. Three of the new plants will be located in Veracruz and one each in Nuevo Leon, Tamaulipas, and Yucatan.

The additional plants will, in effect, enable the industry to double its overall juice processing and evaporating capacity. The nine existing plants have the capacity to remove 131,000 pounds of water per hour and have a total of 60 extractors.

To improve its competitive position in relation to U.S. and Brazilian orange juice, one of the largest existing Mexican plants at Montemorelos recently installed eight 100,000-gallon cold storage tanks to reduce its juice handling costs, insure uniform blend consistency, and facilitate bulk transfer. Similar tanks have been in existence in Florida for 5 years, but these are the first in Mexico.

By the middle of next season, this plant will begin to ship some of its output to the United States in bulk rather than in conventional 55-gallon drums. Frozen-slush juice will be transported by truck in stainless steel tanks holding 20-22 tons at temperatures below freezing.

The juice will be reconstituted and/or packaged in a nearby U.S. state. By shipping such large quantities of juice for the short distances involved, processors will realize a savings in fuel and handling costs.

About 70 percent of Mexico's orange juice output is exported. The United States takes about half of Mexico's juice exports, Canada, Sweden, the Bahamas, and West Germany are other important buyers.

U.S. demand for imported orange juice has been particularly strong in the past few years because the Florida freeze of 1977 pushed up prices for domestic juice. However, Mexico was unable to take full advantage of the market possibilities, largely because of a lack of processing capacity.

U.S. orange juice imports have soared from 31.4 million gallons (single-strength equivalent) in calendar 1976 to 150.7 million gallons in 1978. Almost all of the increase came from Brazil, which, as the world's No. 1 orange juice exporter, has capacity to produce 10-12 times more juice than Mexico. In 1978, U.S. imports of juice from Mexico amounted to 9.9 million gallons and those from Brazil, 139.5 million gallons. During the first 11 months of 1979, Mexico shipped 7.2 million gallons to the United States; Brazil sent 134.4 million

The Mexican orange juice industry is optimistic that U.S. demand will continue strong during the next several years, despite occasional fluctuations. It believes that U.S. population growth and the downward trend in Florida's orange-bearing area—which dropped from 660,000 acres in 1970/71 to 579,000 in 1977/78—will leave ample room for expansion of Mexican juice shipments.

There are four plants in Mexico that section citrus and other fruits and a fifth one is to be built by 1980/81 in Nuevo Leon. About 90 percent of Mex-

ico's output comes to the United States and about 10 percent is shipped to Canada.

In calendar 1978, the United States imported 4,530 tons of Mexican prepared and/or preserved oranges and grapefruit (including citrus sections) valued at $2.2 million, and 4,040 tons of prepared fruit mixtures, worth $2.3 million. Fruit mixtures include several fruits in addition to citrus, such as apples, bananas, melons, and pineapples.

Reportedly, in 1978/79 the Mexican industry has been operating at close to capacity, largely because of the strong U.S. demand for sectioned fruit. But, since Florida's production has been declining in recent years, the new Mexican plant is expected to make more sectioned fruit (canned and chilled) available for export to the United States.

Florida accounts for about 90 percent of all U.S. sectioned fruit production. Since the mid-1960's, Florida's output has fallen by slightly over 50 percent and in 1978/79 it consisted of 5,950 tons of sectioned grapefruit, 2,400 tons of orange sections, and 8,700 tons of fruit salad.

U.S. fruit sectioners, already having difficulty competing with the Mexicans in terms of quality and production costs, may continue to have problems. The Mexican industry has available a large, low-paid labor pool, which enables the industry to produce hand-sectioned fruit. The U.S. product is sectioned by machine.

Mexico also is the world's leading producer of lime oil and juice and its oil exports take care of about 60 percent of global export requirements. Roughly three-fourths of Mexico's lime oil is exported and two-thirds of U.S. requirements come from Mexico. The United Kingdom also takes a sizable volume of Mexico's lime oil.

Most of Mexico's lime juice exports are in concentrated form. Two-thirds go to the United Kingdom, and about one-third is shipped to the United States. This country took 390,000 gallons (single-strength equivalent) of Mexican concentrated lime juice in 1978.

Since Mexico's lime production has stabilized, no significant near-term expansion is anticipated in the export of lime products. It is also likely the United States and the United Kingdom will continue to be Mexico's leading markets for lime oil and juices. □

Japan's Fast-Growing Demand for Imported Fodder and Feed

By Richard J. Blabey

The Japanese market for fodders and feeds—excluding grains, brans, oilseed meals, and prepared feeds—is large and growing larger.

In 1978, Japan imported 1.1 million tons of beet pulp, alfalfa, and assorted roughages. Of this total, U.S. suppliers accounted for 660,000 tons, valued at more than $75 million, and earnings in 1979 were even brighter.

During the first 6 months of 1979, Japan's imports were 664,000 tons—up 31 percent from the year-earlier total. Imports from the United States were up 42 percent, primarily reflecting the continuing surge in imports of sugarbeet pulp and alfalfa cubes.

Imports of baled timothy hay from the United States were resumed in August, following resolution of plant quarantine problems that had severely restricted U.S. shipments to Japan for more than 2 years. The total value of U.S. exports of fodders and feeds to Japan in 1979 is expected to reach $100 million.

Japan's rapidly growing demand for imported beet pulp and hay generally reflects:

- Rapid expansion of livestock production;
- Constraints on domestic expansion of feed and fodder output; and
- Lack of trade restrictions such as duties, quotas, or marketing controls.

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Top: A farm worker delivers hay to a dairy-beef cattle co-op on northern Hokkaido Island, Japan. Bottom: A typical modern dairy farm on Hakkaido.

Steady expansion of Japan's dairy and beef cattle herds is the primary cause of rising demand for these feeds. Since 1974, the dairy herd (cows, calves, and heifers) inventory has trended upward by 64,000 head per year, and the beef cattle herd by 43,000 head. Horse numbers have declined, although the 1979 census indicates that the downward slide may have bottomed out.

The dairy industry is the single largest consumer of roughage and food industry byproducts such as beet pulp. In general, milk production per cow in Japan is less than in the United States and Europe, where intensive feeding is practiced. Some Western dairy specialists consider Japan's dairy herds underfed.

Feeding of roughage outside Hokkaido—Japan's northernmost island and leading milk producing region—averages 40 percent of the total ration on a TDN (total digestible nutrient) basis.

The low consumption rate reflects a general shortage of domestic supply in central and western Japan. Efforts to feed more roughages of higher quality to milking cows are partly responsible for the rapid increase in alfalfa cube and baled hay imports.

Even on Hokkaido, where roughage feeds are in greater supply, intensive feeding of high-energy, high-roughage rations is rare. Dairy farmers have not yet mastered balancing of feed rations to avoid digestive, matabolic, and reproductive disorders when feed programs are stepped up. Eventually, such knowledge should become widespread and be followed by further growth in demand for high-quality forages and feedgrains.

Gradual changes in dairy feeding practices already have had major impact on import demand for feed. Between 1974 and 1977, the self-sufficiency rate for dairy feed—i.e., the share of TDN produced in Japan—declined from 47.6 percent to 43.3 percent.

Food industry byproduct feeding increased during this period, especially among non-Hokkaido dairy producers. To satisfy part of this demand, beet pulp imports grew almost 75 percent.

On many farms, consumption of beet pulp is reaching its limit from the standpoint of animal health. Since intake on Hokkaido is not expected to increase sharply because of satisfactory feed and fodder supplies (except feedgrains), the national average intake per head of beet pulp and other byproduct feeds may not increase much beyond 1979 levels.

Because of current Government and industry efforts to limit expansion of dairy herds in the light of high nonfat dry milk (NFDM) stocks, further short-term growth in import demand for beet pulp may become more dependent upon feeding to beef cattle.

In addition to large import demand created by herd expansion and changing feeding programs, the trend toward larger but fewer herds has upped demand for feeds and fodders purchased off-farm. Expansion of on-farm forage area and production generally has not kept pace with growing herd size.

Unlike byproduct feeds and fodders, practically all imports of alfalfa meal and pellets are purchased by feedmills for inclusion in compound feeds. Of a total 348,000 tons of alfalfa meal and pellets consumed by feed manufacturers during 1978, 42 percent was used in poultry feed production, 26 percent in beef cattle feeds, 21 percent in swine feeds, and 9 percent in dairy feeds.

Expanding compound feed production has caused the consumption of alfalfa meal and pellets to increase slowly but steadily since the 1975 economic recession. However, Japanese feed manufacturers have had to reduce the alfalfa component in most feed formulas because of tight supplies.

Although Japan is increasing domestic feed and fodder production, two factors—limited area and yields—combine to keep expansion of output below growth in demand. Only 15 percent of Japan's total land area of 37.3 million hectares is available for agricultural use. Among the significant factors holding down forage crop yields are the severe winter temperatures in the north and insect and disease problems in the south. Commercial production of hay and hay cubes—75-80 percent of it from Hokkaido—is estimated at less than 100,000 tons annually.

Some Government research centers are breeding improved forage seeds especially suited to Japan's local environments. Registered foundation seed is sent overseas, primarily to the United States, for multiplication under contract. Total forage seed imports, including multiplied varieties, are about 13,000 tons annually—80 percent from the United States.

Imports of food industry byproducts and fodders are free to increase in response to domestic demand because they are not inhibited by tariffs or Government marketing restrictions. Such imports are under the automatic-approval system, and duties are zero.

Beet pulp is usually imported in bulk, pelletized. Importers, wholesalers, and farmers prefer light—almost white—pulp to darker, molasses-added pulp. Importers bag the pellets in 50-kilogram sacks at the ports, and usually sell to farmers for direct feeding.

The United States is Japan's leading supplier of beet pulp, followed by Spain and Chile. In 1978, U.S. beet pulp made up 71 percent of the total 426,000 tons imported, and in the first 6 months of 1979, the U.S. share was 77 percent.

Alfalfa meal and pellets are usually imported in bulk for delivery directly to silos of feedmills. Most commercial feed manufacturers prefer dehydrated alfalfa to sun-cured.

Until 1977, the United States was Japan's leading supplier of alfalfa meal and pellets. When tight supplies in the United States began to reduce export availabilities, Japan turned to Canada and New Zealand. In 1978, Canada supplied 176,000 tons or 54 percent of Japan's total imports of alfalfa meal and pellets, while the United States supplied 37 percent and New Zealand 7 percent.

Hay cubes are usually imported in bulk containers and packed at the ports in 50-kilogram bags. The United States is the dominant source, accounting for 99 percent of 1978 imports. However, imports are beginning to arrive from China at a c.i.f. price around $150-$160 per ton.

Baled hay imports have not increased as much as cubes in recent years because of plant quarantine restrictions on wheat straw and agropyron grasses mixed in hay bales. However, imports resumed in August 1979, following Japanese approval of fumigation procedures developed by USDA (*Foreign Agriculture*, November 1979).

In 1978, Japan's imports of baled hay—primarily alfalfa and Sudan grass—totaled 58,000 tons. The United States supplied 78 percent—up from 52 percent in the previous year. □

Cotton Output Dips In Western Europe, Imports Increase

Western Europe's cotton production in 1979/80 (Aug.-July) is expected to be about 25 percent lower than the year-earlier level of 829,000 480-lb. bales, thus increasing mill requirements for imported cotton.

The crop in Greece—Western Europe's major producer—is expected to be down 32 percent from the 1978/79 level to about 450,000 bales, while Spain's production is projected to be up about 20 percent to about 150,000 bales. Italy—Western Europe's smallest cotton producer—probably will harvest a normal crop of around 5,000 bales.

Cotton imports during 1979/80 are expected to rise in Greece and Spain but fall slightly in Italy.

In Greece, the smaller outturn is a result of a 15 percent reduction in planted area (caused mainly by grower dissatisfaction with the previous year's prices) and crop damage resulting from adverse weather.

Greece's cotton imports for 1979/80 are projected to reach 175,000 bales—94 percent above the 1978/79 level, which was relatively low because of two successive large domestic crops.

Domestic consumption of cotton in Greece has been expanding rapidly, mainly in response to booming textile exports. The total value of cotton good exported in calendar 1978 is officially estimated at $221 million, 22 percent above the 1977 level.

Greece's consumption in 1979/80 is projected at 675,000 bales—6 percent above the year-earlier level and more than 40 percent above the 1973-77 average. Greece hopes to meet its rapidly domestic demand and still remain a significant exporter of raw cotton.

Exports of cotton in 1979/80 are forecast at 50,000 bales, compared with an estimated 133,000 bales in 1978/79 and 101,000 bales actually exported in 1977/78. Bulgaria, Czechoslovakia, Hungary, and Poland have been the main markets for Greek cotton in recent years.

The United States has been a significant supplier of raw cotton to Greece. Of the 123,000 bales imported in 1977/78, more than one-third came from the United States. Imports were lower in 1978/79—an estimated 92,000 bales—but the United States again supplied more than one-third of the total.

For the 1980/81 year, Greek cotton area is expected to decline again from 1979/80's 143,000 hectares and the 168,000 hectares planted in 1978/79. Rising labor costs are reported to be a major factor in the continuing area decline. Even though favorable weather could be expected to result in improved yields, cotton imports in 1980/81 could reach record levels.

However, the Greek Government is interested in expanding cotton area because of the improved prospects for cotton under the accession treaty Greece signed with the European Community (EC) in May 1979. Cotton is included in the EC's Common Agricultural Policy (CAP) and receives some support from the EC. Since 1980 is the last of 3 successive crop years to be averaged by the EC in determining future production increases, Greece had hoped to expand cotton area and thus benefit by the provisions of the CAP for cotton.

Spain's 1979/80 cotton production is expected to reverse its declining trend of recent years and reach 150,000 bales—up 20 percent from the relatively low level of the previous year but far below the 1970-74 average of 234,000 bales.

The decline in Spanish cotton output is a result of rising production costs (including labor-intensive, uneconomic operations imposed by restrictions on mechanization to alleviate unemployment), demands for higher wages, and grower dissatisfaction with support prices.

Improved quality and yields are expected from the current crop, which is planted on slightly larger area than the previous year's. Among the factors in the projected higher level of output are financial aids for mechanization of harvesting, sharp increases in support and premium prices paid growers, and a joint agreement between producers and the appropriate unions on increased mechanization.

Spain's cotton imports in 1979/80 are expected to approximate the previous year's level of 328,000 bales, which was about 40 percent higher than the year-earlier import total. The higher level of imports is a result of a recent upward trend in domestic consumption and—until recently—exports of textile products.

Exports of yarns and fabrics have declined recently as a result of a loss of competitiveness resulting from appreciation of the Spanish peseta. However, the Government's success in reducing the rate of inflation and the recent conclusion of a trade arrangement providing for 10-15 percent more Spanish textile exports to the EC in 1979 and 1980 are expected to boost Spain's cotton consumption and textile exports in 1979/80.

Cotton products expected to benefit most from the arrangement with the EC are yarns and fabrics, jeans, some underwear items, sheets, and sweatshirts.

Spain has been importing more than half of the 550,000-600,000 bales of cotton it uses annually, and the United States has been a leading supplier.

In the 1977/78 marketing year, the United States supplied slightly over 30 percent of Spain's total cotton imports, and in 1978/79 about 23 percent. In fiscal 1977 (Oct.-Sept.), U.S. cotton exports to Spain of 85,000 bales (valued at $33 million) were the second highest on record, while exports in fiscal 1978 were 70,000 bales (valued at $20.5 million) and in fiscal 1979, 65,000 bales (valued at $21.9 million).

Spain's 5-year (1979-83) program for increasing cotton production calls for expanding area from 50,000 hectares in 1979/80 to 90,000 hectares by 1983/84. During this period, area to be cultivated by mechanization is projected to increase from 12,000 hectares (24 percent of total area) to 78,000 hectares, or 87 percent.

The plan also aims to have 1,500 mechanical harvesters in use in 5 years without any significant reduction in employment from the 1978/79 level. To achieve these goals, the Government is offering premium payments to producers, an expanded credit program, and input subsidies.

The 1979/80 production year could be the turning point in Spain's cotton production. Favorable factors include a modest increase in area and an

Continued on page 36

FACT FILE

Changes in U.S.-USSR Agricultural Relations

Suspension of Agricultural Exports to USSR. On January 4, President Carter announced that the United States would limit grain shipments to the USSR to 8 million metric tons of wheat and corn during October-September 1979/80, the fourth year of a 5-year grain agreement with that country. This action was taken—in response to the Soviet invasion of Afghanistan—for reasons of national security and foreign policy under the Export Administration Act. Following a directive from the President to the Secretary of Commerce on January 7, U.S. exports to the USSR of all agricultural commodities and products were terminated effective 11:59 p.m. EST, that day. In accordance with the provision as of the regulation published in the *Federal Register* on January 9, validated licenses are required on agricultural exports to the USSR. As of press time, exports of meat plus commodities needed by the Soviets for feed were still prohibited, exports of products needed for feed or meat replacement under extreme circumstances were being subjected to a case-by-case review, and those of products with no strategic significance were exempt from prior licensing review.

Status of Trade at Time of Suspension. Actual shipments to the USSR through January 7 of the October 1979-September 1980 agreement year stood at 5.5 million tons of grain covered in the agreement (1.9 million of wheat and 3.6 million of corn). In addition, 182,700 tons of barley, 11,600 of rice, 806,000 of soybeans, and 40,700 of soybean oil had been shipped.

Wheat and corn exports and outstanding contracts as of that date totaled 21.8 million tons (6.7 million of wheat and 15.1 million of corn). This meant that—after subtracting the tonnages already shipped and the 2.5 million tons still to be shipped—sales contracts totaling about 13.8 million tons had to be cancelled.

Minimizing Effects on U.S. Agriculture. On January 7, Vice President Mondale announced that President Carter had directed the Secretary of Agriculture to assume the contractual obligations for wheat, corn, and soybeans committed for shipment to the USSR. The Vice President said that the grain will not be sold back into the markets until it can be done without unduly affecting market prices. Both the President and the Vice-President emphasized that action would be taken to ensure that U.S. farmers face essentially the same supply-demand conditions this year as if the sales to the Soviet Union had gone forward. USDA has announced a series of measures to encourage additional holding of grain reserves and, thus, remove grain from the market.

U.S. Grain Trade Forecast Changed. On January 16, USDA issued revised agricultural supply and demand estimates on U.S. grains and soybeans. Exports of wheat and feedgrains during 1979/80 now are forecast at 99 million tons, compared with the previous forecast of 109 million. This would still be 6 million tons above last year's level of 93 million.

Consultations with Other Grain Exporters. Consultations were held in Washington, D.C., on January 12 with other major grain exporters—Canada, Australia, Argentina, and the European Community—to promote their cooperation in restricting exports of grain to the USSR. At this meeting, there was a general agreement that these governments would not directly or indirectly replace grain the United States would have shipped to the Soviet Union. The Argentine position was later stated by Minister of Agriculture Zorregueta as one in which the Argentine Government will not support an economic boycott, but will not pursue measures to take trade advantage of the restriction on U.S. exports.

Assessment of Impact on USSR. On January 15, USDA issued its first public report on the changed Soviet agricultural outlook. Key assessments are that the reduced wheat and corn supply from the United States for October-September 1979/80 will probably cause USSR imports of non-U.S. grain to be larger than previously expected. However, because availability of non-U.S. origin grain may also be somewhat limited, the cutback of the U.S. supply level is almost certain to have a combination of short-run effects for the USSR, including (1) smaller total imports; (2) less grain feeding; and (3) an additional drawdown of available reserves.

Soviet grain availability for feed during the 1979/80 July-June year is expected to be down 6 million tons from the previous forecast of 128 million, and Soviet meat production in 1980 could be 300,000 tons below the previous year's. The heavy Soviet grain imports during the first half of this year, some expected further reduction in Soviet grain stocks, and larger imports from other sources all tend to lessen the severity of the reduction in feed supplies in the short run. Total Soviet grain imports during 1979/80 (July-June) now are forecast at 25 million tons, compared with the previous forecast of 34 million.

Past Trends in Soviet Grain and Livestock Production. Soviet grain production varied tremendously during the past decade, ranging between 140 million tons in 1975/76 and a record 237 million in 1978/79, owing mainly to severe fluctuations in weather. Production in 1979/80 dropped to 179 million tons.

Despite this erratic grain output, the USSR has remained committed to increasing domestic consumption of livestock products. Soviet poultry numbers grew 75 percent during the 1970's; hog numbers, 30 percent; and cattle numbers, 20 percent. However, the hog herd was cut by 20 percent, and poultry, by 7 percent in the year following the 1975 grain shortfall. The Soviets maintained the growth in their cattle herds at that time.

Soviet meat production has risen by a fourth during the decade, despite a 9-percent drop in 1976, to a total of about 15.3 million tons in 1979. The Soviet goal is to produce 19.5 million tons of meat per year by 1985.

Since 1972/73, the Soviets have sustained the expansion in their livestock industry by importing large quantities of grain, particularly from the United States. The cutback in livestock numbers during 1975/76 would have been even more severe had the Soviets not imported about 26 million tons of grain during the 1975/76 marketing year.

Heretofore, the Soviets have relied on the United States for about two-thirds of their grain imports. In their peak importing years, the Soviets have accounted for 15-20 percent of all U.S. grain exports. U.S. agricultural exports to the USSR totaled $2.2 billion in value during 1978/79, compared with sales to the EC of $7.4 billion and to Japan of $5.1 billion.

Impact on U.S. Grain Supplies. Since the suspension of sales, and the upward revision in estimates of the U.S. corn harvest, USDA has raised its estimate of U.S. 1979/80 ending grain stocks by 14 million tons to 87 million. Nearly 40 percent of those stocks are likely to be isolated from the market in the farmer-owned reserve, which is now projected to increase to 32 million tons, rather than drop to 20 million as previously anticipated.

USSR Cattle, Hog, and Poultry Numbers and Meat Production, 1970-79

Year	Numbers (as of January 1)			Total meat production
	Cattle	Hogs	Poultry	
	Mil. head	*Mil. head*	*Mil. head*	*Mil. tons*
1970	95.2	56.1	590.3	12.3
1971	99.2	67.5	652.7	13.3
1972	102.4	71.4	686.5	13.6
1973	104.0	66.6	700.0	13.5
1974	106.3	70.0	747.7	14.6
1975	109.1	72.3	792.4	15.0
1976	111.0	57.9	734.4	13.6
1977	110.3	63.1	796.0	14.7
1978	112.7	70.5	882.3	15.5
1979	114.1	73.5	953.2	15.5
1980	115.0	73.7	[1]1,000.0	[2]15.2

[1] Estimate. [2] Forecast.

USSR: Total Grain, Wheat, and Coarse Grains: Supply/Utilization, 1972/73-1979/80

[In million metric tons]

Year	Production	Trade (July/June)		Availability[1] (July/June)	Utilization						Stock change[3] (July/June)
		Imports	Exports		Total[2]	Seed	Industrial	Food	Dockage-waste	Feed	
Total grains:[4]											
1972/73	168	22.8	1.8	189	187	26	3	45	15	98	+ 2
1973/74	223	11.3	6.1	228	214	27	3	45	33	105	+14
1974/75	196	5.7	5.3	196	206	28	3	45	23	107	-10
1975/76	140	26.1	.7	166	180	28	3	45	14	89	-14
1976/77	224	11.0	3.3	232	221	29	3	45	31	112	+11
1977/78	196	18.9	2.3	213	228	28	4	45	29	122	-16
1978/79[5]	237	15.6	2.8	250	231	28	4	46	28	125	+19
1979/80[6]	179	25.2	.8	203	222	28	4	46	22	122	-19
Wheat:											
1972/73	86	15.6	1.3	100	98	14	1	35	8	41	+ 2
1973/74	110	4.5	5.0	109	96	14	1	34	16	30	+13
1974/75	84	2.5	4.0	82	93	14	1	34	10	34	-11
1975/76	66	10.1	.5	76	87	15	1	35	7	30	-11
1976/77	97	4.6	1.0	100	92	15	1	35	14	28	+ 8
1977/78	92	6.6	1.0	98	108	15	1	35	14	44	-10
1978/79[5]	121	5.1	1.5	125	107	14	1	35	14	43	+18
1979/80[6]	86	9.8	.5	95	111	15	1	35	11	49	-16
Coarse grains:											
1972/73	72	6.9	.4	79	79	11	2	7	7	53	0
1973/74	101	6.4	.9	106	105	11	2	7	15	70	+1
1974/75	100	2.7	1.0	101	100	11	2	7	12	68	+1
1975/76	66	15.6	—	81	84	12	2	7	7	56	-3
1976/77	115	5.7	2.0	119	116	12	3	7	16	78	+3
1977/78	93	11.7	1.0	103	109	11	3	7	14	74	-5
1978/79[5]	105	10.0	1.0	114	113	12	3	7	13	79	+1
1979/80[6]	84	14.9	0	99	102	12	3	7	10	70	-3

[1] Availability excludes beginning stocks. [2] Totals may not add due to rounding. [3] Total grain production, trade, and utilization figures include pulses, paddy rice, buckwheat, and miscellaneous grains, in addition to wheat and coarse grains. [4] Minus indicates withdrawal from stocks. [5] Preliminary for trade, availability, utilization, and stocks change. [6] Forecast. Source: USSR Task Force.

Spain

Citrus Output Follows Trend, To Fall in 1979/80

Spanish citrus production has shown a slight drop in recent years and is expected to fall again in 1979/80, although orange and lemon output should show increases. While it is believed by some producers that Spain's citrus production will not expand significantly in the immediate future (with the possible exception of lemons), what happens later will largely depend on the export opportunities that become available when Spain joins the European Community (EC) sometime in the early 1980's.

The Spanish Ministry of Agriculture's revised estimate for the 1978/79 citrus crop is 2.84 million metric tons—1.65 million tons of oranges (including about 21,500 tons of bitter oranges), 896,127 tons of tangerines, 285,639 tons of lemons, and 9,402 tons of grapefruit. Much of the fruit was small in size because of a drought, adversely affecting export demand.

Trade sources indicate that the 1979/80 crop also was damaged by dry weather, again increasing the percentage of small fruit and again possibly hurting export sales. The beginning-of-season estimate by the Ministry places the current citrus crop at 2.83 million tons—1.72 million tons of oranges (including 22,000 tons of bitter oranges), 792,344 tons of tangerines, 307,486 tons of lemons, and 9,185 tons of grapefruit.

The 1979/80 citrus crop is forecast 0.5 percent smaller than the 1989/79 crop, which itself was about 1 percent smaller than that of a year earlier.

Orange and tangerine areas have been declining and between 1976 and 1977, orange area fell by 9.8 percent to 129,878 hectares and tangerine area by 24.8 percent to 41,865 hectares. Lemon area, on the other hand, rose by 8.4 percent to 30,034 hectares, with most of the increase taking place in the Provinces of Alicante, Malaga, and Murcia. Most of the tangerine and orange area reductions occurred in Valencia, where tree removals for the two fruits totaled 26,578 hectares.

Spain's traditional orange production areas mostly are in the Valencia region, where small, terraced citrus holdings are usual, and where little growth potential exists. As a result, producers are eying Seville, where at present only about 6-7 percent of Spain's orange area is located, but which has excellent expansion possibilities.

Plantations in Seville are substantially larger than in Valencia, and citrus planting and cultivation practices there resemble those in California. Moreover, although yields are minimal, production costs are reportedly lower in Seville than in Valencia. Land also is cheaper in Seville and the groves have not yet been attacked by tristeza.

Citrus area in Seville is estimated at about 13,000 hectares, of which 86 percent is in oranges (mostly navels and bitter oranges) and 13 percent in tangerines (mainly Clementines).

Lemon production in Seville is insignificant because of unfavorable climatic conditions (the area is subject to late December and January frosts). More suitable than Seville for increases in lemon production is the Province of Murcia, where area expansions already are underway.

On the basis of preliminary data released by the Spanish Ministry of Agriculture, Spanish citrus exports in the 1978/79 season totaled 1.68 million metric tons (860,000 tons of oranges, 613,500 tons of tangerines, 200,000 tons of lemons, and 4,700 tons of grapefruit). This was down about 4 percent from exports in the 1977/78 season.

France, West Germany, and the Netherlands took some 76 percent of Spain's citrus exports in 1978/79. These and other EC countries are expected to take about 90 percent of the 1979/80 citrus exports.

Spanish citrus exports in the 1979/80 season are projected by the trade (as of late October) at 1.71 million tons—910,000 tons of oranges, 587,000 tons of tangerines, 215,000 tons of

Fruit-laden Spanish citrus trees. Spain's 1979/80 citrus output will probably again be somewhat lower than in 1978/79.

lemons, and 5,000 tons of grapefruit—a total only nominally larger than in the previous season.

However, the final outcome hangs on the effect the generally smaller size of the 1979/80-season fruit will have on exports, as well as a projected 15 percent rise in production costs and stiff competition from Morocco, Israel, and other Mediterranean producers.

Spanish exporters assess the season as a whole as one of the worst in years, despite the fact that throughout the 1978/79 season Spanish citrus exports to the EC have enjoyed a 40-percent customs preference. This feeling is explained by high prices paid to citrus growers, particularly in the summer and early fall of 1978, low prices paid in export markets because of depressed economic conditions in Western Europe, the small size of a large share of the exported fruit, and revaluation of the peseta.

The transport strike in Britain in early 1979 was another blow to the Spanish citrus industry, forcing exporters to divert supplies to France at lower prices. According to trade reports, Spanish exporters have been selling citrus for less than cost throughout most of 1978/79 with a loss of millions of pesetas.

Based on current export and processing projections, Spain's consumption of fresh citrus fruit is expected to approximate 807,000 tons in 1979/80, a rise of 2 percent from the previous season's.

Spain's Citrus Coordinating Committee conducts intensive advertising and promotion campaigns at home and abroad, and reportedly spent Ptas270 million for 1978/79 activities in Western Europe—primarily in France, West Germany, Belgium, and the United Kingdom. The Committee is expected to earmark Ptas220 million for its 1979/80 activities. (Ptas 65.90=US$1.00.)

Spanish citrus fruits are usually of high quality because of the extensive use of relatively modern quality-control methods, including modified-atmosphere storage facilities, fungicides, waxes, and commercial degreening methods.

The industry recently adopted the use of products containing imazalil to reduce the effect of rot-producing fungi, enhance the shine of the fruit's skin, and to cut weight loss by inhibiting transpiration and respiration, and to slow the aging process.

Containerization is gaining momentum in Spain, although packing efficiency is limited since exporters use a wide variety of packages.—*Based on report from Leon G. Mears, U.S. Agricultural Attaché, Madrid.* □

China

Soybean Imports Seen Larger, Most To Come From U.S.

Soybean imports by the People's Republic of China (PRC) may be twice as large in the 1979/80 (September-August) marketing year as in the previous one, with most of the increase coming from the United States.

PRC soybean imports could reach and possibly exceed 550,000 tons, compared with 254,000 tons in 1978/79 and 188,000 tons in 1977/78.

It appears that the PRC will be a net importer of about 250,000 tons of soybeans in 1979/80, despite the fact that its exports to Japan are again rising to the levels of the early 1970's—about 250,000-300,000 tons.

In 1978/79, the PRC is believed to have been a minimal net soybean exporter.

As of the end of December 1979, contracted U.S. soybean sales to the PRC for 1979/80 already had reached 450,000 tons, compared with 142,000 tons in 1978/79, and only 55,000 tons in 1977/78. Additional sales of U.S. beans could still be announced during the marketing year, but, in previous years, most U.S. purchases were made in the last quarter of the calendar year.

Sales of soybeans to the PRC in 1979/80 from other origins—mainly Brazil and Argentina—could equal the average levels of the past 3 years—roughly 150,000 tons. An increasing portion of imports from these suppliers, however, may be of Argentine origin rather than Brazilian because of Argentina's rapidly expanding soybean surplus and Brazil's preference for exporting meal and oil rather than beans.

In addition to shipments from the United States, in 1978/79 only 10,000 tons were supplied by Brazil and 102,000 tons by Argentina, compared 100,000 tons from Brazil and 33,000 tons from Argentina in 1977/78 and about 230,000 tons from Brazil alone in 1976/77.

The rise in PRC soybean imports appears to be largely because of increased domestic demand pressures. Recently, the PRC has taken steps to increase individual incomes and loosen controls on consumption.

Imports of oil-quality beans should free more of the PRC's domestic production for its traditional food uses.

The PRC also recently began experimenting on a small scale, so far, with livestock feeding. These factors could have added to the demand for soybeans, even though the 1979 PRC soybean harvest did not experience major problems during the year and is estimated to have equalled the good 1978 crop of 10.5 million tons.

PRC contracts for imports of soybean oil in the 1979/80 (October-September) marketing year are expected to approximate last year's imports of 123,000 tons, down from 184,000 tons in 1977/78. The more limited level of PRC soybean oil imports in 1979/80 and 1978/79, compared with those of 1977/78, is likely because of the improved PRC oilseed harvests of 1978 and 1979, versus the poor harvests of 1977 and 1976.

But, as the end of December, only one 1979/80 optional origin contract for 20,000 tons of soybean oil had been registered with the U.S. Department of Agriculture, although there have been reports of additional purchases from the United States.

In 1978/79, the United States exported 61,000 tons of soybean oil to the PRC, 45,000 tons less than in 1977/78.

PRC discussion with Brazil will likely also result in agreement for additional purchases of soybean oil for 1979/80 delivery. Brazil's 1978/79 soybean oil exports to the PRC amounted to 45,000 tons, 31,000 tons less than in 1977/78.—*By Carolyn L. Whitton, Economics, Statistics, and Cooperatives Service.* □

Italy

Rice, Feedgrain Imports To Be Cut By Outstanding Crops

Excellent 1979 rice, corn, and barley crops probably will cause Italy to reduce or stabilize its imports of these grains, while reductions in crop outturns will bring larger foreign purchases of wheat and oats. Imports from the United States—an important supplier of many of these grains—will rise or fall, depending on Italy's requirements.

Italy's smaller 1979/80 wheat outturn will probably result in larger total wheat imports, with much of the increase being of imported Durum wheat, offsetting a dip in bread wheat imports. The United States also will supply a large share of these purchases.

In 1978, a climb in Italy's wheat production resulted in smaller imports of both bread and Durum wheats, although purchases of both types from the United States were somewhat larger than in the previous year.

Unofficial sources estimate Italy's 1979 wheat production at 8.8 million tons, 100,000 tons less than the level reported earlier. Largely responsible for the reduction in the production estimate is a downward revision in bread wheat output.

According to some authorities, area planted to Durum in weeks toward the end of the 1979 planting season was significantly larger than that planted in the same period of 1978. Farmers increased their Durum plantings because of relatively high prices in the sowing period. Bread wheat area, on the other hand, appears to have continued its long-term fall, a result of larger Durum plantings in central Italy and of barley in the north.

Imports of both types of wheat are expected to total 2.7 million tons in 1979/80, 750,000 tons of Durum and 1.95 million tons of bread wheat. These figures represent a 56 percent rise in Durum imports and a 5 percent fall in bread wheat imports.

Italian trade sources indicate that most of 1979/80's imports of bread wheat will come from the European Community (EC), but that some 500,000 tons will be from third countries. About 350,000 tons of third-country bread wheat are expected to be U.S. Northern Spring. About half of the estimated Durum imports (some 480,000 tons) is expected to be of U.S. origin.

Wheat imports during August-September 1979, the first 2 months of the 1979/80 marketing year, amounted to 473,000 tons of bread wheat—an increase of 116 percent over those of the same months a year earlier—while Durum imports—at 102,000 tons—were up 26 percent.

In the previous season, Italy's wheat production climbed from 6.2 million metric tons in 1977 to 9.2 million in 1978, while imports dropped from 4.4 million tons in 1977/78 to 2.5 million in 1978/79. The United States was an important supplier of Italy's bread wheat in 1978/79, but it ran a poor second to France. But at the same time, the United States rose from the second spot as a supplier of Durum in 1977/78 (after Canada), to the leading position in 1978/79.

In 1978/79 Italy's bread wheat import sources, with volumes in 1,000 metric tons (with 1977/78 totals in parentheses), were: France, 1,417 (1,851); the United States, 299 (290); Canada, 151 (253); Argentina, 95 (155); and West Germany, 5 (418).

Italy's suppliers of Durum in 1978/79, with shipments for the same 2 years were the United States, 261 (194); Canada, 174 (769); Argentina, 40 (188); and France, 1 (153).

In most years Italy exports nominal amounts of wheat and wheat products, particularly to countries in the Middle East. In 1978/79, such shipments consisted of 163,000 tons of pasta to all importers, 329,000 tons of Durum semolina (mostly going to Algeria), and 278,000 tons of wheat flour. Syria took 91,000 tons of the flour, Algeria, 67,000 tons, and Libya, 53,000 tons. Egypt was the other major buyer, taking 12,000 tons.

In 1977/78, pasta shipments totaled 150,000 tons; semolina, 200,000 tons; and flour, 276,000 tons. The same countries were again the major purchasers.

The 1979 corn crop is estimated at about 6.4 million tons, some 3 percent more than the previous year's. This increase resulted because slightly more area was planted to corn, and generally favorable weather existed during the summer and fall months of 1979.

During the 1978/79 marketing year, Italy imported 4.1 million tons of corn, 40 percent more than the exceptionally low level of 2.9 million tons the previous year. The United States was again the major supplier in 1978/79 with shipments of 2.3 million tons, up 73 percent from those of the previous year. Argentina is Italy's other major source of corn, providing 1.5 million tons in 1977/78 and 1.7 million tons in 1978/79.

Italy's rice production in 1979 is unofficially estimated at a bumper 1.0 million tons (rough), for a milled rice outturn of 705,600 tons. The rough rice crop is 6 percent larger than 1978's. Favorable weather during the 1979 summer months and fall harvesting period resulted in high yields of exceptional-quality rice.

On a milled basis, Italy imported 193,000 tons of rice during 1978/79, 18 percent less than in the previous year, while it exported 485,000 tons, 47 percent more. Most of Italy's rice imports came from the United States, and the larger share of its exports went to the EC and developing countries. Most of the U.S. rice was paddy (196,000 tons), which, when milled, was reexported.

During August-September 1979, Italy's rice imports totaled 21,000 tons, 42 percent less than in the same period a year earlier, while exports were 67,000 tons, 10 percent more. According to trade reports, 30,000 tons of the 1979 U.S. rice crop paddy already have been sold to Italy.

Although official and trade indicators are lacking, Italy's 1979 bumper rice crop indicates Italy's 1979/80 exports of domestic rice will probably rise and imports drop because of sizable export restitutions given to the domestic product.

Italy's 1979 production estimate for its barley crop is 840,000 tons and that for oats is 420,000 tons. Growers in northern Italy reportedly switched to some extent from their traditional wheat-growing patterns,

which feature bread wheat, and shifted to the planting of barley—at least for the 1980 crop—because of better returns.

During the 1978/79 marketing year, barley imports of 1.3 million tons were 13 percent less than the previous year's total.

In that year, the EC further expanded its share of the Italian barley market.

Barley imports from Canada continued to decline. Those from the United States have fallen precipitously in the past 3 years, from 108,000 tons in 1976/77 to 13,000 tons the following year and zero in 1978/79.

Preliminary statistics indicate that Italy imported 233,000 tons of barley in August-September 1979, 8 percent less than in the equivalent period a year earlier.—*Based on report from Edmund L. Nichols, U.S. Agricultural Counselor, Rome.* □

Indonesia

Use of Coconut Oil Cut To Permit Larger Exports

Indonesia's drive to boost domestic use of palm oil to free more domestic coconut oil for export and reduce coconut oil imports has begun to have an impact on that country's trade in tree oils.

Shipments of palm oil were expected to be lower in 1979 than in the year before and Indonesia expects to have a small amount of coconut oil for export. In addition, the Government's palm oil campaign is seen slashing by more than half imports of coconut oil and eliminating imports of copra.

Indonesia's exports of palm kernels are seen rising in 1979, while exports of palm kernel oil were banned. Its imports of soybeans, mostly from the United States, were expected to be greater than in 1978.

Indonesia's total coconut production (including coconuts for crushing and edible uses) in 1979 has been estimated at about 1.52 million metric tons—compared with 1.47 million in 1978—from a 1979 harvested area of about 1.75 million hectares. The success of the Government's substitution drive is seen resulting in a 70 percent decline in coconut oil imports, at least in 1979.

The Minister of Trade and Cooperatives announced in September that because of the success of the substitution program, Indonesia has a "surplus" equivalent to 50,000 tons of coconut oil, and planned to export about 10,000 tons of coconut oil and 20,000 tons of copra. The exact export figure was to be set later and a variable export surtax was to be placed on shipments of these products so as not to cause a rise in domestic market prices.

Although protests against these plans were expressed in Parliament and by copra crushers who had excess crushing capacity available, the Ministry of Agriculture said the exports would be made but only on a trial basis. It was reported that a drop in coconut oil marketings by the Philippines gave Indonesia an excellent opportunity to return to the export market.

However, a later drop in international coconut oil prices and the institution of the new export tax make it unlikely that Indonesia will be able to put its coconut oil into export channels at a profit. In fact, trade sources indicate that 3,000 tons of coconut oil recently were shipped to the United States at prices that resulted in a loss. Also, the Indonesian Government announced that its export targets would not go into effect before the end of 1979 because of the drop in international prices.

In recent years, Indonesia was a net importer of coconut oil. In 1979, Singapore and the Philippines were the major sources of Indonesia's coconut oil imports. During January-May 1979, the Philippines provided 27,000 tons of such oil to Indonesia, and Singapore shipped 283 tons.

In 1978, the Philippines provided 91,430 tons, and Singapore, about 1,000 tons. Japan and Malaysia were less important suppliers that year.

West Germany took 83,800 tons of Indonesia's copra cake exports in the first 5 months of 1979, and the Netherlands took 24,925 tons. The same two countries were Indonesia's most important export markets in 1978, with purchases of 224,580 tons by West Germany and 76,140 tons by the Netherlands. Singapore also was a major copra cake market in both years, taking 6,030 tons in the first 5 months of 1979 and 23,610 tons in 1978.

Palm oil production during the first 7 months of 1979 totaled 315,600 tons, up from 260,300 tons produced in the same period of 1978. Production gains during May, June, and July of 1979 were smaller than expected.

These midyear statistics suggest that 1979 production is likely to surpass 600,000 tons, but probably will not reach the 620,000-625,000 range projected by the Ministry of Agriculture unless sizable output is realized from new fields that reached maturity during the last half of 1979.

Between January and May 1979, Indonesia's five most important markets for palm oil export were: Kenya, the Netherlands, Iraq, West Germany, and the Soviet Union. The United States—a less important market—took about 4,570 tons.

The Minister of Agriculture has been quoted in the Indonesian press as saying that 324,000 tons of the 1979 palm oil production (which he estimated at 621,500 tons) would be reserved for domestic utilization. This implies that 1979 exports of palm oil would be slightly less than 300,000 tons.

However, 1979 consumption probably will fall short of the Minister's estimate and more than 300,000 tons of palm oil will be available for export—likely in the neighborhood of 310,000-335,000 tons.

Palm kernel production through July 1979 stood at 59,000 tons (up 25 percent from the 47,300 tons of 1978), and the year's total is seen rising to some 115,000 tons from the previous year's 99,400 tons.

Palm kernel exports were about 5,400 tons higher in the first 5 months of 1979 than in the same period of 1978, a rise probably resulting from the Government's drive to put a cap on domestic edible oil prices, the ban on palm kernel oil exports, and the Government's drive to promote palm oil consumption and reduce that of coconut oil.

At the current export rate, shipments of palm kernels in 1979 might have

rebounded to the 1977 level of 25,000 tons, a figure considerably higher than 1978's 7,000 tons. The chief beneficiaries of this surge will probably be the privately owned oil palm estates.

Although banned in 1979, palm kernel oil exports were 8,980 tons in 1978. There are reports, however, that some palm kernel oil was exported in 1979 as coconut oil. Palm kernel meal exports in 1978 increased from those of a year earlier to 26,670 tons, and those of 1979 are expected to be roughly the same as in 1978.

Indonesia's soybean production in 1979 is officially estimated to approximate the 1978 production level of 570,860 tons, although some officials privately believe that output will reach 630,000 tons.

Through the month of May 1979, soybean imports totaled 55,850 tons, compared with 113,990 tons in the same period of 1978. But the total for 1979 will likely reach between 140,000 and 160,000 tons—compared with 130,490 tons for 1978—as the Government is determined to stabilize retail soybean prices in many regions of Indonesia by making more beans available.

Some private traders estimate that soybean meal imports will reach as high as 70,000 tons in 1979. However, a figure somewhere in the neighborhood of 40,000-50,000 tons is probably a more accurate estimate.

In the first 5 months of 1979, the United States provided 33,820 tons of Indonesia's imported soybeans and 11,300 tons of its soybean meal imports. Canada was Indonesia's second most important supplier of soybeans in that period (22,030 tons) and Singapore was second as a supplier of soybean meal (1,110 tons).

In 1978, the United States provided 125,360 tons of Indonesia's soybean imports and Canada, 5,130 tons. Brazil was 1978's largest supplier of soybean meal (16,370 tons). The United States was the source for 791 tons and India 1,650 tons.—*Based on report by Thomas M. Slayton, Assistant U.S. Agricultural Attaché, Jakarta.* □

Peru

Fishing Prospects Dim, Soybean Oil Imports To Rise

Peru's hopes for a sustained recovery in its fishmeal industry have dimmed once again, with the recent drop in the country's anchovy catch and resulting cutback in fishing activity. These bleak prospects, together with a stock drawn down during a strong 1979 export season, suggest that Peru's fishmeal supplies will be extremely tight this year.

Since fish oil production also is affected by the reduced catch, the country most certainly will have to import more soybean oil in 1980 than the 20,000 metric tons received in 1979. So far, Peruvian Government import plans call for purchases of 85,000 tons of oil this year, a large part of which could be supplied by the United States.

Last year, in contrast, began on a positive note. The larger than expected 1978 fish catch for reduction, particularly toward the year's end, had given rise to hopes that 1979 would begin a revitalization of Peru's fishing industry. Enthusiasm was reinforced in early 1979 by fishing results, which by the end of the first 4 months had reached 1.6 million tons. Even after the official March 5-April 28 fishing season ended, there were reported sightings of large and numerous anchovy schools.

As the months passed, however, prospects began to cloud. Sightings were less abundant for no discernible reason. This apparent drop in the anchovy population led the Ministry of Fisheries to authorize only exploratory fishing activities to begin on October 1.

Fears of smaller catches of exploitable fish were soon confirmed, with yields on some days totaling an unusually low 3,000-4,000 tons. As fish were located, daily catches approached 15,000 tons, still significantly less than what had been expected. Consequently, after only a month in the waters, boats were called out on November 2, with the exception of limited activity in the extreme south.

Through October 1979, the country's fish catch for meal and oil production stood at around 2.4 million tons, compared with almost 3 million in all of 1978 and about 2.2 million through October 1978. In 1978, however, more than 800,000 tons of fish were landed in the final 2 months, whereas only small tonnages will be recorded for the last 2 months of 1979.

Fishmeal production through October 1979 is estimated at 596,000 tons, compared with 669,500 in all of 1978, with output in the last 2 months of 1979 again minimal.

Exports in 1979, on the other hand, may have approached 700,000 tons, against only 483,200 in 1978, as a result of Government attempts to maximize profits during a period of strong world demand.

PESCAPERU, the Government agency responsible for most production and all marketing of fishmeal, entered the 1979 season with sizable carryin stocks of 221,100 tons. It thus was able to export some 50,000 tons more fishmeal during the first 9 months than was actually produced.

Reasons for the abrupt turnaround are not clear. Some sources believe that the exceptionally mild

Peruvian fishermen haul in a catch of anchovies, source of one of the country's leading export commodities, fishmeal.

winter was a contributing factor, as it may have been in 1973. That, of course, was the year of the big decline in Peru's anchovy fish catch—from averaging more than 10 million tons annually during 1970-71 to only 1.5 million tons—owing to a mysterious depletion of the country's fisheries, normally among the richest in the world.

The cause of that shortfall is still being debated. One reason put foward is that a change in ocean currents sent the cold "El Nino" waters, in which anchovies thrive, on another course far off the coast of Peru. Another was that the fisheries had been depleted by overfishing in the late 1960's and early 1970's.

The resulting decline in Peruvian fishmeal production and trade was one of many factors behind the extremely tight world supply of protein feed during 1973/74.

Circumstances now are vastly different from those of 1973/74, in the face of the large U.S. soybean harvest last year and resulting abundance of oil and meal. Consequently, the impact of any decline in Peruvian fishmeal exports should be limited, especially in view of the ready substitutability of most protein meals.

In the intervening years since 1973, Peru's fishing has shown erratic results, but has never since approached the high levels of the early 1970's. The industry's decreased importance has worked to the detriment of the Peruvian economy, which in 1970 derived nearly a third of its export earnings from fishmeal and oil, whereas by 1978 that share had fallen to 9 percent.

Meanwhile, the country has all but ceased fish oil exports in the face of declining production and rising domestic consumption. This trade reversal is reflected in the Government's preliminary plan to import 85,000 tons of soybean oil in 1980. With edible oil stocks extremely low, pure vegetable oil will make up a larger portion of sales and prices will rise accordingly.

Fish production for food uses, on the other hand, has experienced a renaiscence during the past few years, with 1978 exports reported to be some 1,450 percent above those in 1975. This industry, still largely in private hands compared with Government ownership of the fishmeal and oil operations, recently has raised objections about the diversion of edible fish into meal and oil output.

The fish packers argue that most species other than anchovies should be reserved for human consumption. They are expected to maintain pressure against open fishing for meal and oil production, particularly in view of the limited anchovy population. It is thus possible that no major open fishing will occur during 1980, although limited fishing may be permitted in the Ilo Zone just north of Chile.

So far, the private sector has not established operations in this region, nor does fishing for reduction there directly compete with the packing industry. Consequently, it has been suggested that the Ministry of Fisheries might allow expanded activities in this zone. Over 100 boats reportedly could be authorized to fish, compared with only a small number now.

Even such expansion, however, would not significantly alter Peru's total fishmeal and oil outturns, since the zone still would account for a small share of the country's total fish catch.—*Based on a report by Richard L. Barnes, U.S. Agricultural Attaché, Lima.* □

India

Peanut Crop Estimate Lower, Reduction Helps U.S. Exporters

Because a dry winter in 1979 cut India's peanut production in some of its most productive States—a condition further complicated by unseasonable showers in October and November—that country's 1979/80 peanut crop is expected to be some 10 percent smaller than in 1978/79.

As a result, India's exports of handpicked select peanuts (HPS) are expected to be smaller in 1979/80. This shortfall will probably help U.S. peanut exporters maintain sales in some of India's traditional European markets.

The 1979 monsoon remained active in southern India as late as the end of September, but the cumulative effects of the erratic rainfall reduced prospects that the crop would match the 6.4-million-ton (in-shell) outturn of 1978/79. The trade estimated the crop size at several levels during the season, ranging from 5.4 million tons to 6.0 million tons, with a midpoint estimate of 5.7 million tons.

Erratic early-year weather included a dry spell in July in Gujarat, where about 30 percent of the nation's peanut crop is grown. This was followed by heavy rainfall in early August in parts of the same state which caused flooding. However, despite these events, Gujarat's kharif peanut crop increased from 1.75 million tons in 1978 to nearly 2 million in 1979, helping offset the smaller peanut crops in some other States.

Until late December 1978, the Indian Government had banned exports of HPS peanuts. At that time however, it announced that 25,000 tons could be exported in 1979, considerably below expectations of Bombay traders.

But even the limited export quota has not been met as shipments reached only 18,000 tons by the end of June. An additional 5,000 tons were sold by India in Europe and Japan in the late months of 1979, but the total is still considerably short of the goal.

Leading customers for India's peanut exports in 1979 were Yugoslavia and Czechoslovakia, with minor sales being made to several other countries having trade agreements with India.

But some of India's export customers are unhappy with the current situation.

Some of India's European peanut buyers, as well as many of the Bombay traders, complain about the handling of peanut exports by India's National Agricultural Cooperative Marketing Federation, which took over export operations a few years ago.

They think that the private trade did a better job of controlling quality and handling details connected with the export of peanuts. This feeling may have some effect on future Indian peanut exports, but it is impossible at this time to determine the impact, if any, on shipments to traditional markets.—*Based on report by John B. Parker, Jr., Economics, Statistics, and Cooperatives Service.* □

TRADE BRIEFS

Additional Assurance Offered on U.S. Farm Sales to Poland

An additional $79.1 million in protection against payment defaults for non-commercial reasons are available to exporters selling U.S. agricultural products to Poland, according to a recent announcement by Kelly M. Harrison, General Sales Manager and Associate Administrator, FAS . . . the protection offered is up to $32 million for feedgrains, $22 million for wheat, $7.1 million for soybeans, $15 million for protein meals, and $3 million for edible soy protein . . . under the $300 million in coverage offered earlier on U.S. exports to Poland, up to $112 million have been designated for feedgrains, $34 million for wheat, $30.8 million for soybeans, $54.28 million for protein meals, $5 million for edible soy protein, $25 million for cotton, $8 million for tobacco, and $5.95 million for tallow . . . the remaining $24.97 million in commodity designations will be announced later.

Thai 1979 Rice Exports Reach Near Record

Strong rice export movement achieved by Thailand over the past several months has pushed Thai rice exports to a near-record 2.7 million tons in 1979, up sharply from 1.6 million in calendar 1978 . . . in addition, some 615,000 tons already has been contracted for delivery to Indonesia in 1980 . . . because of the early October withdrawal of the monsoon and dryness during the planting stages of Thailand's second rice crop (harvested mainly during May-June), Thai rice exports in 1980 are not expected to reach the high level registered last year.

Australia Signs Grain Pact With Indonesia

Australia recently negotiated a contract to supply Indonesia with 600,000 to 700,000 tons of wheat between December 1979 and November 1980 with the value estimated at around $100-$110 million . . . during the 1978/79 season, Australia exported 603,000 tons of wheat to Indonesia . . . Indonesia's wheat import requirements are expected to continue at about the 1.2-million-ton level, with the United States and Australia sharing about equally in that market.

$1.4 Million in Beef Sold During 'Boatique America' Trip to Japan

"Boatique America," the U.S. Commerce Department's unique floating department store, recently completed its 2-month tour of 13 major Japanese ports with a stop in Yokohama . . . during the successful voyage, which began October 12 in Tokyo and ended December 9, almost a half million Japanese consumers visited the ship and purchased some $3 million in U.S. commercial merchandise and some $1.4 million in U.S. beef products, the only U.S. agricultural commodity aboard . . . many U.S. companies that were represented on the ship are now negotiating for future business contracts to establish a permanent place in the large Japanese market.

Outlook for U.S. Rice Sales Boosted as Nigeria Lifts Ban on Imports

The outlook for U.S. rice exports in 1979/80 has been boosted by Nigeria's recent decision to lift its ban on rice imports . . . in lifting the ban that was imposed on September 19, 1979, the Government ordered that import licenses be issued for the import of 200,000 tons of rice . . . Nigeria's foreign purchases of rice have expanded rapidly in recent years . . . in 1978, the United States supplied 256,000 tons of Nigeria's total purchases of 739,000 tons, with Thailand providing the rest . . . that year, imports exceeded domestic output for the first time.

Philippines Dairy Expansion Continues; Swine Imports Rising

The Philippines dairy industry is expected to continue its expansion throughout 1980 as a result of the launching of the first two phases of the dairy development act . . . arrival of cattle during the first 10 months of 1979 totaled 2,410 head, compared with 1,791 head in 1978 and 1,210 head in 1977 . . . the 1979 imports included 155 head of breeding beef cattle and 285 head of dairy cattle from the United States . . . during the 10-month 1979 period, the Philippines imported 1,740 head of breeding swine, up sharply from 1,489 in 1978 . . . the United States was by far the leading 1979 supplier, shipping 1,131 head to the Philippines.

Argentina's Wheat Exports Seen Rising in 1979/80

Argentina's wheat exports during the current 1979/80 marketing year are forcast at 3.9 million tons, compared with 3.3 million tons exported in 1978/79 . . . as of early January—with more than 50 percent of the crop harvested in the north and about 15 percent in the south—the 1979/80 wheat crop is projected at 7.85 million tons . . . major export markets are Brazil, the USSR, China, Peru, Paraguay, and Chile.

Canada Registers Favorable Trade Balance in Pork

Reflecting abundant supplies, a favorable exchange rate, and increased shipments to both the United States and Japan, Canada registered a positive trade balance in pork during 1979 . . . total 1979 pork exports are estimated at 82,000 tons, with those to the United States surpassing those to Japan . . . in 1980, increased pork supplies in the United States may temper the level of Canadian pork shipments to U.S. points—thus, Japan is expected to be the largest buyer this year . . . Canada's pork imports dropped sharply in 1979 to about 35,000 tons, compared with 54,239 tons a year earlier . . . the United States is the major supplier of pork to Canada, normally accounting for about 95 percent of the market.

Apple, Pear Imports By Norway Expect to Hit Record Levels

Norway's apple and pear imports are expected to reach record levels in 1979/80 following an early opening of the import seasons . . . apple imports may exceed 40,000 tons, with most of these coming from Argentina (about 15,000 tons), France (about 10,000 tons), and Denmark (about 5,000 tons) . . . imports of U.S. apples, at around 3,500 tons, may be slightly higher than those of last season . . . Norway's pear imports may reach 11,000 tons, with the Netherlands being the top supplier with about 4,000 tons followed by the United States with about 2,000 tons.

WORLD AGRICULTURAL DAYBOOK

February/March

Trade/Technical Team Trips

U.S. Teams Overseas

Date	*Team*	*To*
Jan. 18-Feb. 6	Dry Pea & Lentil Council	Japan, Philippines, Taiwan Hong Kong, Malaysia, India
Jan. 19-Feb. 15	Dry Pea & Lentil Council	Panama, Colombia, Ecuador, Brazil, Venezuela
Feb. 9-28	Peanut promotion	West Germany, U.K., Sweden
Jan. 28-Feb. 1	FAS sales team	Costa Rica, Panama
Feb. 9-28	Peanut promotion	West Germany, U.K., Sweden

Foreign Teams in the U.S.

Date	*Team*	*To*
Jan. 22-Feb. 8	Lebanese oilseed processing	Georgia, Louisiana, Illinois, Missouri, New York
Jan. 30-June 17	Indonesian trainees	American Institute of Baking School, Manhattan, Kan.

Meetings

Date	*Organization and location*
Feb. 1-3	Western States Meat Packers Assn., San Francisco, Calif.
Feb. 14-15	Cotton, Inc., board of directors, Dallas, Tex.
Feb. 17-21	Lamb Promotion Coordination Committee (import outlook), Kerrville, Tex.
Feb. 18-22	American Brahman Breeders Assn., Houston, Tex.
Feb. 20-24	National Cattlemen's Assn. annual convention, San Diego, Calif.
Feb. 21-22	OECD joint working party on agriculture and trade, Paris.
Feb. 25-29	FAO Intergovernmental Group on Grain, Rome.
Early March	U.S.-European Community consultations on wine trade, Brussels.
Mar. 3-5	Inter-American Institute for Agricultural Sciences, San Jose, Costa Rica.
Mar. 3-6	Food Aid Committee special session, London.
Mar. 3-13	FAO regional conference, Asia & Pacific, New Delhi.
Mar. 3-14	International Cocoa Council, London.
Mar. 5-6	OECD ....nisterial meeting, Paris.
Mar. 7	OECD Committee for Agriculture, Paris.
Mar. 10-14	UN Economic Committee for Europe's Committee on Agricultural Problems, Geneva.
Mar. 12	Tobacco Associates, Inc., annual meeting (export prospects), Raleigh, N.C.
Mar. 13-15	U.S. Tobacco Assn. annual meeting, Hilton Head, S.C.
Mar. 17-21	FAO Intergovernmental Group on Rice, Rome.
Mar. 17-Apr. 3	FAO Committee on Food Security, Rome.
Mar. 18-21	Cotton Development International, Geneva.
Mar. 24-28	UNCTAD preparatory meeting for cotton, Geneva.
Mar./Apr.	U.S.-Andean Pact talks, Washington, D.C.

Trade Fairs/Exhibits

Date	*Event and Location*
Feb. 11-14	ROKA International Exhibit, Utrecht, Netherlands
Feb. 24-Mar. 1	National Livestock Show, Dominican Republic
Feb. 25	American wine testing exhibit, Brussels
Mar.2-9	International Agricultural Show, Paris
Mar.8-16	International Agricultural Show, Verona
In March	National Beef Cattle Show, Mexico

World Food Prices

Data for the bimonthly article, "World Food Prices," were not available at press time for the February issue of *Foreign Agriculture*. The article will appear in the March issue.

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Korea's Booming Farm Market

Continued from page 8

However, Korean importers also have obtained $100 million in GSM-101 guarantees by CCC on money made available through private banks at terms close to those provided under CCC credit. Even at their recent levels of around 15.75 percent or more, these terms appear attractive to importers vis-a-vis the 27-28 percent interest rates in Korea.

In Korea, as in most countries of the world today, there are a few clouds on the horizon that potentially could curb its phenomenal import growth. One omnipresent concern is Korea's dependency on the world market for virtually all of its petroleum needs.

The Koreans have, on the other hand, exhibited great ingenuity in overcoming just as formidable obstacles in the past. Moreover, they have capitalized on the Middle Eastern petroleum boom through construction and service contracts in the region—worth some $5 billion annually. These contracts helped shift the country's balance of payments position from a deficit a few years ago to a $1.6 billion surplus in 1978.

Korea has built a solid and diversified industrial base, focusing on textiles, automobiles, electronics, shipbuilding, and a variety of other products. And it has gained a competitive edge over developed countries such as Japan as a result of relatively low wages and high productivity.

The country also has become Asia's second largest exporter next to Japan, shipping a record $15 billion worth of products in 1979, and its gross national product is expected to approach Italy's in 1980.

Imports of raw materials, including agricultural products, have provided the basis for this rapid economic growth and will continue to do so in the future, given Korea's lack of natural resources.

Regarding agricultural imports per se, Korea long has been highly dependent on the United States as a source of supply. In 1978, it received 64 percent of all such imports—and more than 95 percent of its cotton, soybeans, corn, and wheat—from this country.

Parker sees competition in the market gradually accelerating and perhaps eventually reducing the U.S. market share to 50 percent. But he also anticipates new opportunities in the sale of U.S. beef, processed foods, and other consumer-ready items as rising incomes—now about $1,250 per capita—boost demand for such products.

Shelden says that the Koreans have a feeling of obligation toward the United States for its assistance during the Korean War and continuing presence in the country. "This is still one country in the world where there are no 'Yankee go home' signs," says Shelden. "They want us to stay, and they want to buy as much from us as possible." □

Cotton in Europe

Continued from page 24

agreement between producers and unions permitting an expansion of mechanized harvesting. However, the continued attractiveness of irrigated land for such competitive crops as corn, wheat, sunflowers, and sorghum—all of which require less labor—could counteract the Government's expansion plans for cotton.

In Italy, cotton production remains at a relatively insignificant level. Lack of tradition, technology, equipment, and the small size of farms in Sicily (the only economically viable cotton area in Italy) limit the possibilities for any significant degree of expansion in area.

U.S. cotton exports to Italy totaled 95,216 bales valued at $30.2 million in fiscal 1978 and 146,900 bales valued at $49.9 million in fiscal 1979.

Although the Italian cotton industry was quite active during the 1978/79 marketing year some decline is anticipated in 1979/80. Consumption and imports could decline to about 873,000 bales, compared with 918,000 bales in the previous year.—By *James Lopes; Economics, Statistics, and Cooperatives Service.* □